

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-101  
May 27, 2004

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

RECEIVED  
SEP 14 2004  
Submit to appropriate District Office  
☐ AMENDED REPORT

OCD-ARTESIA

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

<sup>1</sup> Operator Name and Address MYCO INDUSTRIES, INC. P.O. BOX 840, ARTESIA, NEW MEXICO 88210		<sup>2</sup> OGRID Number 015445
<sup>3</sup> Property Code	<sup>5</sup> Property Name SALT DRAW 15 STATE COM	<sup>6</sup> Well No. #1
<sup>9</sup> Proposed Pool 1 WC / Unders. Salt Draw ; Morrow		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no. A	Section 15	Township 25S	Range 28E	Lot Idn	Feet from the 660'	North/South line NORTH	Feet from the 660'	East/Westline EAST	County EDDY
--------------------	---------------	-----------------	--------------	---------	-----------------------	---------------------------	-----------------------	-----------------------	----------------

<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/Westline	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	---------------	--------

Additional Well Information

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 2974'
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth 13,400'	<sup>18</sup> Formation MORROW	<sup>19</sup> Contractor PATTERSON UTI	<sup>20</sup> Spud Date 10/15/2004
Depth to Groundwater 100-200'		Distance from nearest fresh water well > 1 MILE		Distance from nearest surface water > 5 MILES
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 20 mil thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: _____ Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

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

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	~ 500-550'	400 SXS	CIRCULATE
12-1/4"	9-5/8"	40#	4500'	1000 SXS	CIRCULATE
8-3/4"	5-1/2"	17#	13400'	2000 SXS	2000'

<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.

NOTE ATTACHED "APPLICATION FOR DRILLING - PROCEDURE"

\* Set Surface above Salt Section of Salado.  
Please refer to offset logs/geol. for more information.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒.

OIL CONSERVATION DIVISION

Approved by:

TIM W. GUM

Printed name: A.N. MUNCY *Ann Muncy, PECS*

Title:

DISTRICT II SUPERVISOR

Title: OPERATIONS/ENGR. MANAGER

Approval Date:

SEP 15 2004

Expiration Date:

SEP 15 2005

E-mail Address: anmuncy@mycoinc.com

Date: 09/14/2004

Phone: (505)748-4289

Conditions of Approval Attached ☐

## APPLICATION FOR DRILLING – PROCEDURE

MYCO INDUSTRIES, INC.  
SALT DRAW 15 STATE COM #1  
S15-T25S-R28E  
660' FNL & 660' FEL  
Ground Elevation – 2974'

In conjunction with Form C-101, Application for Permit to Drill subject well, Myco Industries, Inc. submits the following items of pertinent information in accordance with OCD procedures:

1. The geologic surface formation is Quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are:

Quaternary	Surface
Top of Rustler	880
Castille Anhydrite	2440
Top of Delaware	2510
Top of Bone Spring	6190
Bone Spring First Sandstone	7080
Base First Bone Spring Sandstone	7365
Top of Wolfcamp	9590
Top of Strawn	11665
Strawn Zone #1	11680
Atoka Zone #1	11715
Atoka Zone #2	11775
Atoka Zone #3	11905
Base Atoka Shale	11975
Atoka Zone #4	11985
Top of Morrow Clastics	12355
Top of Barnett Shale	13355
Total Depth	13400

3. The estimated depths at which oil or gas formations are anticipated to be encountered:  
Water: Surface water between 100 to 200 feet  
Oil: Anticipate potential oil in the Bone Spring formation at approximately 7100 feet  
Gas: Anticipate gas in the Atoka formation and Morrow formation

4. Proposed Casing Program

<b>HOLE SIZE</b>	<b>CASING</b>	<b>WEIGHT</b>	<b>GRADE</b>	<b>JOINT</b>	<b>DEPTH</b>	<b>CEMENT</b>
17 ½"	13 3/8"	48#	H-40	ST&C	450'	Circ 400 sxs HLC&Prm Plus
12 ¼"	9 5/8"	40#	K-55	LT&C	4500'	Circ 1000 sxs HLC&Prm Plus
8 ¾"	5 1/2"	17#	N-80	LT&C	13400'	2000 sxs 50/50 Poz. TOC 2000
		17#	P-110	Hyd.511	(btm 3000)	

\*NOTE: Will run fluid caliper on surface and intermediate.

Optional: If pressure encountered in Wolfcamp will run 7" string to surface as stated below, and then run a 5" liner.

<b>HOLE SIZE</b>	<b>CASING</b>	<b>WEIGHT</b>	<b>GRADE</b>	<b>JOINT</b>	<b>DEPTH</b>	<b>CEMENT</b>
8 3/4"	7"	29#	N-80	Hyd.511	11665'	1300 sxs 50/50 Poz. TOC 2000
6 1/4"	5"	20#	P-110	Hyd.511	13400'	TOL 11300 200 sxs Class H

5. Minimum Specifications for Pressure Control Equipment

A 13 5/8" 10,000 psi WP Shaffer, LWS Double Gate BOP will be installed on the 9 5/8" casing and tested as per Onshore Oil and Gas Order #2 as a 3000 psi system. An annular preventer will be installed on the 13 3/8" casing to drill to the 2500 depth. The casing and BOP will be tested before drilling out with the 8 3/4" bit.

6. Mud Program:

<b>DEPTH</b>	<b>DESCRIPTION</b>	<b>MUD WEIGHT</b>	<b>VISCOSITY</b>	<b>W/L CONTROL</b>
0-450'	Native Mud	8.4-9.0 ppg	32-36	None
450-2490'	Brine	9.5-10.0 ppg	32-36	None
2490-11500'	Cut Brine	9.0-10.0 ppg	28-32	None
11500-13400'	Cut Brine	10.0-10.3 ppg	32-36	< 10cc

7. Auxiliary Equipment: Mud Gas Separator, Blowout Preventer, flow sensors and stabbing valve.

8. Testing Program:

Drill Stem tests: None unless conditions warrant.

Logging: 13,400 to 2,500': DLL, CNL-HDT, GR

Surface to 2,500': CNL with GR

Coring: Sidewell Cores if dictated by logs.

9. Notify NMOCD – Artesia prior to spud, running surface casing, running intermediate casing and running long string casing.

10. Notify NMOCD – Artesia prior to pit construction.

## State of New Mexico

Energy, Minerals and Natural Resources Department

## DISTRICT I

1200 S. FRANCIS DR., SANTA FE, NM 87505

## DISTRICT II

1301 S. CHAND AVENUE, ALBUQUERQUE, NM 87102

## DISTRICT III

1000 E. SPRING ST., ALBUQUERQUE, NM 87102

## DISTRICT IV

1200 S. ST. FRANCIS DR., SANTA FE, NM 87505

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

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name <b>SALT DRAW 15 STATE COM</b>	Well Number <b>1</b>
OCRD No.	Operator Name <b>MYCO INDUSTRIES, INC.</b>	Elevation <b>2974'</b>

## Surface Location

UL or Lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
A	15	25-S	28-E		660	NORTH	660	EAST	EDDY

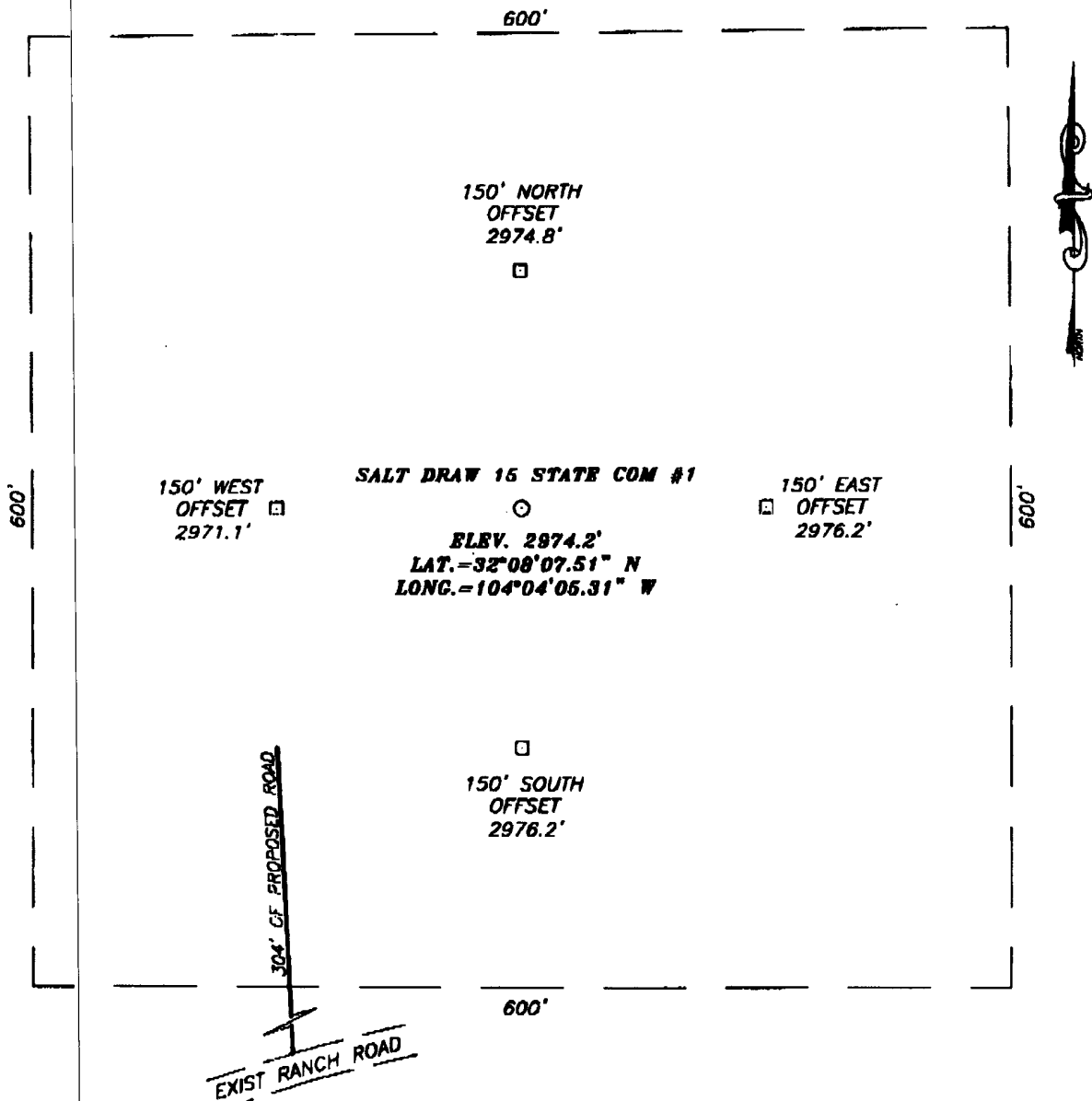
## Bottom Hole Location if Different From Surface

UL or Lot No.	Section	Township	Range	Lot 1/4	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

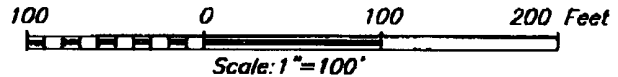
	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>A. N. Muncy</i> Signature: A. N. MUNCY Printed Name OPER-EXPLOR MGR Title 9-14-04 Date</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 9, 2004</p> <p>Date Surveyed: _____ Signature: _____ Professional Surveyor NEW MEXICO GARY K. EIDSON 04.11.174 Certified by: _____ Professional Surveyor</p>
--	--

**SECTION 15, TOWNSHIP 25 SOUTH, RANGE 28 EAST, N.M.P.M.,**  
**EDDY COUNTY, NEW MEXICO**



**DIRECTIONS TO LOCATION**

AT MILEPOST 10 ON ST. HWY. #285, GO SOUTH ON ST. HWY. #285 FOR APPROX. 0.6 MILES TO A GATE ON THE EAST SIDE. TURN LEFT ON RANCH ROAD AND GO EAST AND NORTH APPROX. 0.5 MILES TO PROPOSED LOCATION.



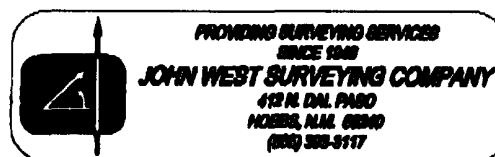
**MYCO INDUSTRIES, INC.**

SALT DRAW 15 STATE COM #1 WELL  
 LOCATED 660 FEET FROM THE NORTH LINE  
 AND 660 FEET FROM THE EAST LINE OF SECTION 15,  
 TOWNSHIP 25 SOUTH, RANGE 28 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.

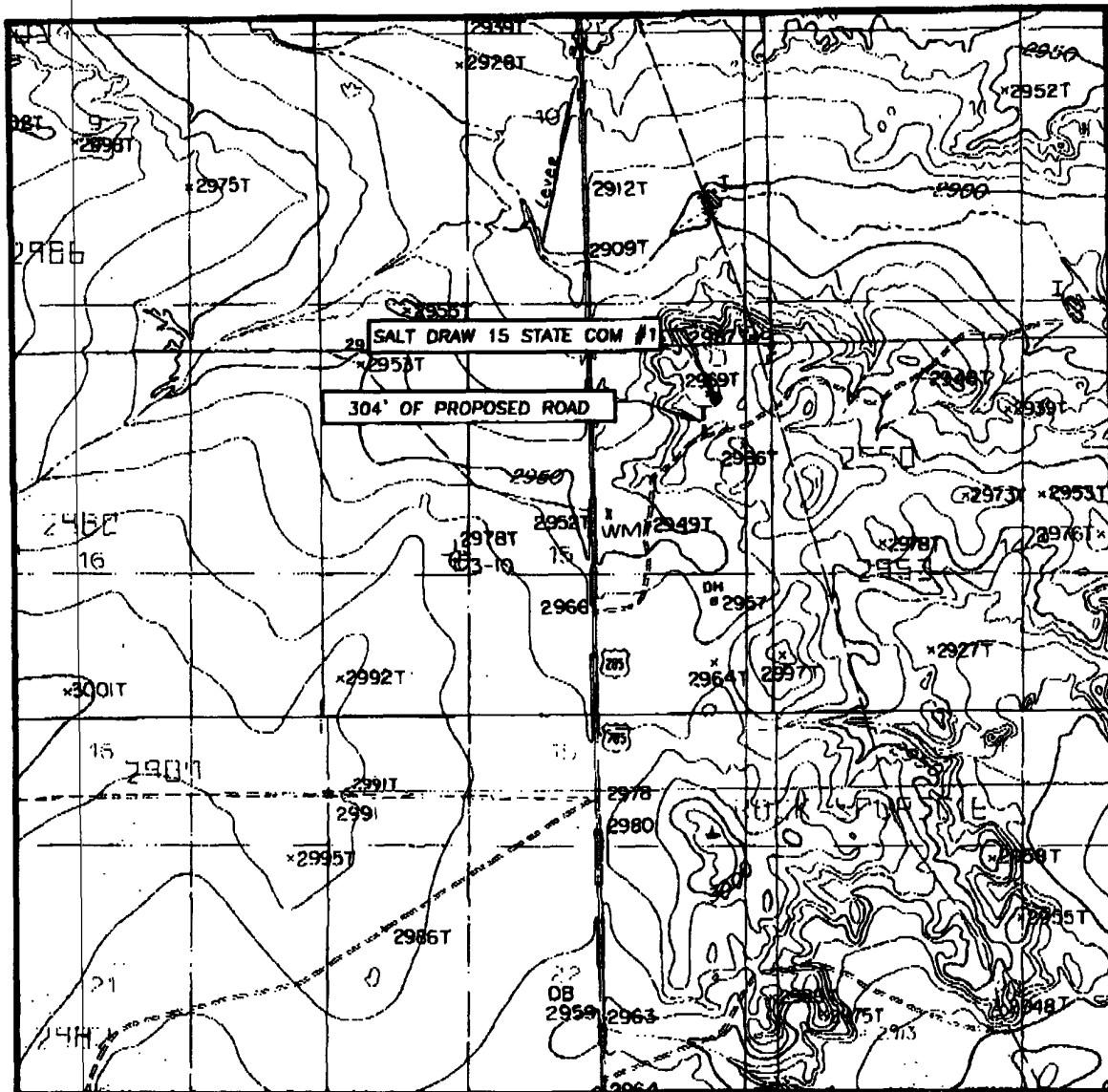


PROVIDING SURVEYING SERVICES  
 SINCE 1948  
**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO  
 HOBBS, N.M. 88240  
 (505) 393-3117

Survey Date: 09/9/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.1174	Dr By: J.R. Rev 1: N/A
Date: 09/10/04	Disk: CD#10 04111174 Scale: 1"=100'



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 15 TWP. 25-S RGE. 28-E

SURVEY N.M.P.M.

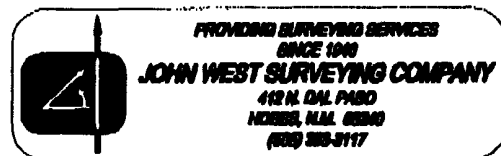
COUNTY EDDY

DESCRIPTION 660' FNL &amp; 660' FEL

ELEVATION 2974'

OPERATOR MYCO INDUSTRIES, INC.

LEASE SALT DRAW 15 STATE COM

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



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
Acting Director  
Oil Conservation Division

15 April 2004

Yates Petroleum Corporation Et Al  
Yates Petroleum Corp.  
105 South 4th Street  
Artesia, New Mexico 88210

RE:  
General Plan for Pits Submitted 4-14-04.

Dear Mr. Dolan,

The Oil Conservation Division of Artesia is in receipt of your plan. The plan is hereby accepted and approved with the following provisions:

1. Approval of plan does not permit pits in any watercourse, lakebed, sinkhole, playa lake, or wetland. (19.15.2.50.C.2.a.)
2. Pits in groundwater sensitive areas or wellhead protection areas may be subject to additional measures or may not be allowed. This will be on site specific, case-by-case basis. (19.15.2.50.C.2.a.)
3. All pit encapsulations must meet all specific criteria including, but not limited to, site evaluation, liner thickness, and/or amount of and type of cover.
4. The Division may attach additional conditions to any permit upon a finding that such conditions are necessary to prevent the contamination of fresh water, or to protect public health or the environment. (19.15.2.50.C.3.G.1.)
5. Notify the Artesia O.C.D. 48 hours prior to the closing of any storage or production pit.
6. Notify the Artesia O.C.D. 48 hours prior to any sampling event.
7. Re-seeding mixture will be approved or authorized by surface owner.

If I can be of any further assistance, please feel free to call (505) 748-1283 ext. 109.

Sincerely,

A handwritten signature in dark ink, appearing to be "Van Barton", written over the word "Sincerely,".

Van Barton



MARTIN YATES, III  
1912 - 1985  
FRANK W. YATES  
1936 - 1986



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (505) 748-1471

S. P. YATES  
CHAIRMAN OF THE BOARD  
JOHN A. YATES  
PRESIDENT  
PEYTON YATES  
EXECUTIVE VICE PRESIDENT  
RANDY G. PATTERSON  
SECRETARY  
DENNIS G. KINSEY  
TREASURER

April 14, 2004

Oil Conservation Division  
State of New Mexico  
Attn: Mr. Van Barton  
1301 W. Grand Ave.  
Artesia, NM 88210

Re: General Plan  
Pit design and operation, Drilling Workover, and Blowdown.

Companies included in this plan are:

1. Yates Petroleum Corporation
2. Yates Drilling Company
3. Abo Energy Company
4. Myco Industries
5. Agave Energy Company

Yates Petroleum Corporation Et Al is requesting approval to construct, use and close the above described pits, as per the attached diagrams the aforementioned pits will be lines as required, according to the rules and guidelines as set forth in Pit Rule 50.

The attached diagrams are standard pits used on all Yates Petroleum Et Al drilling and workover operations, minor changes may be needed from time to time to work safely with the terrain and environmental conditions on a site-specific basis.

All pits will be constructed to prevent contamination of fresh waters, human health, and the environment.

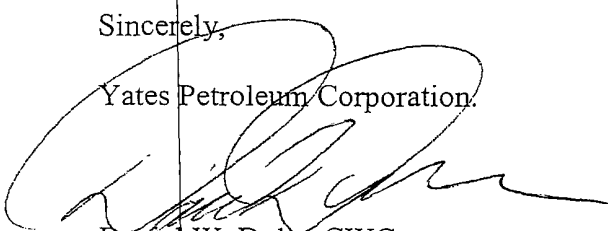
During operations, all pits will be fenced as required to maintain safety for livestock and wildlife.

When the pit is no longer used, it will be closed according to all applicable rules of the OCD, and all required reports will be submitted at that time.

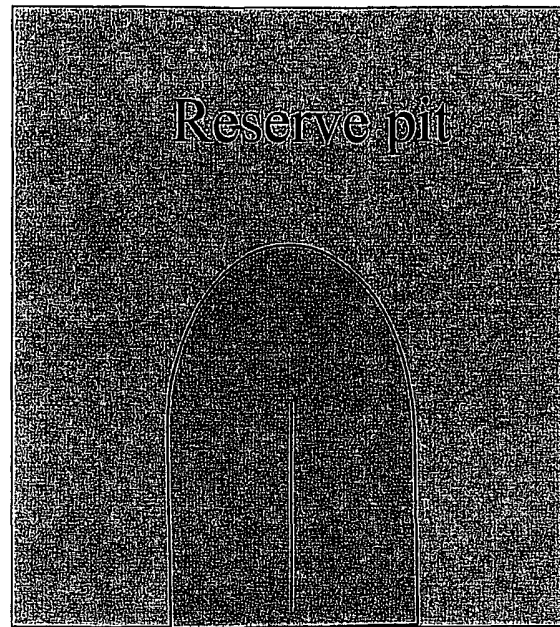
If we can be further assistance, please feel free to call (505) 748-4181.

Sincerely,

Yates Petroleum Corporation.



Daniel W. Dolan CWC  
Environmental Field Tech.



Flare pit

Standard reserve pit. All Reserve pits are double  
Horse shoe size varies with depth of well

Figure "A"

Built with Dozer  
2-Blades wide  
60' Long  
4' or 5' Deep

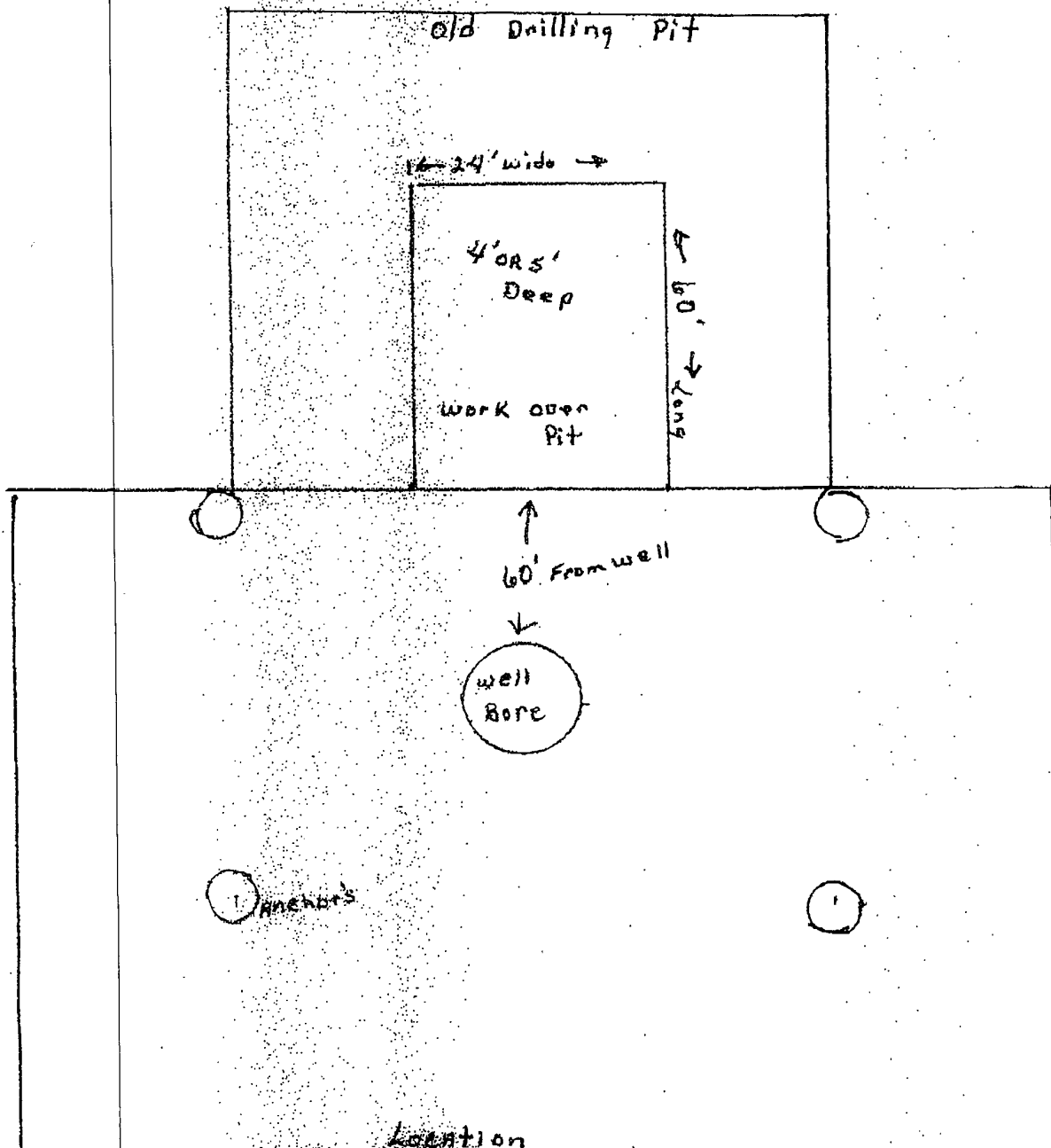


Figure "B"

Built with Dozier  
1/8" blade wide  
60' Long  
4' to 5' Deep

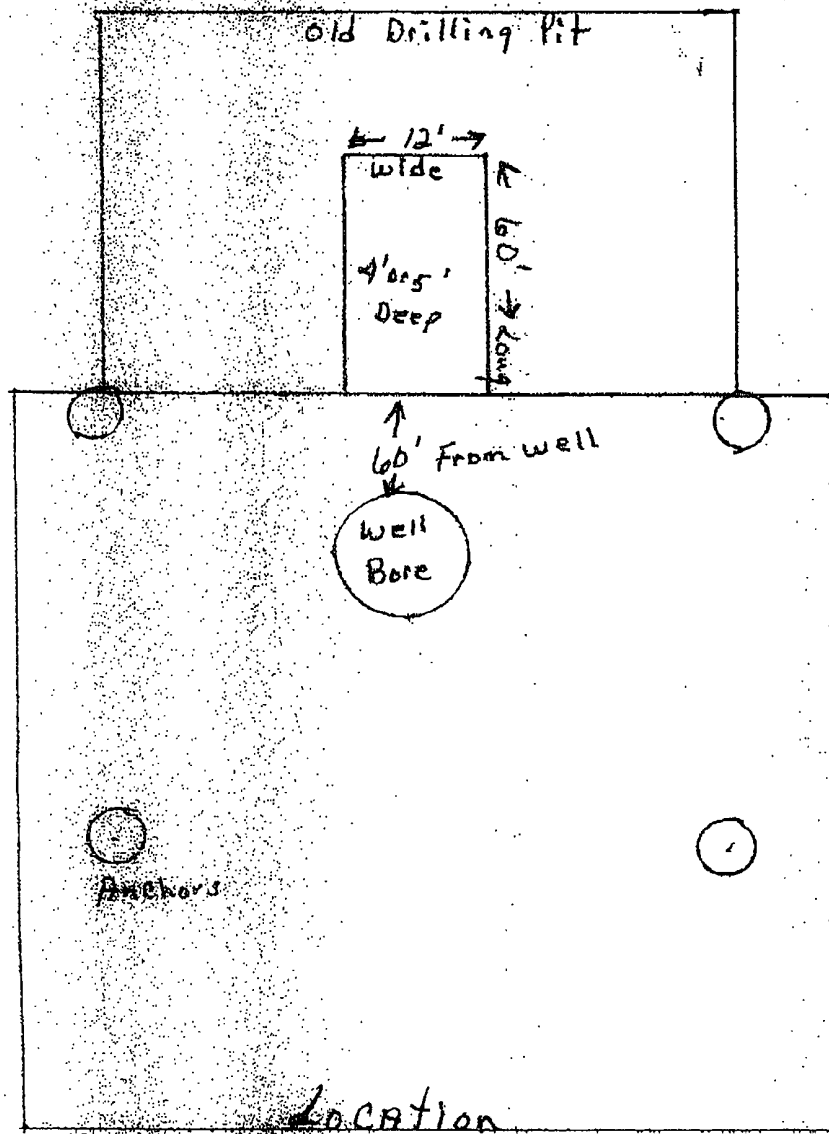
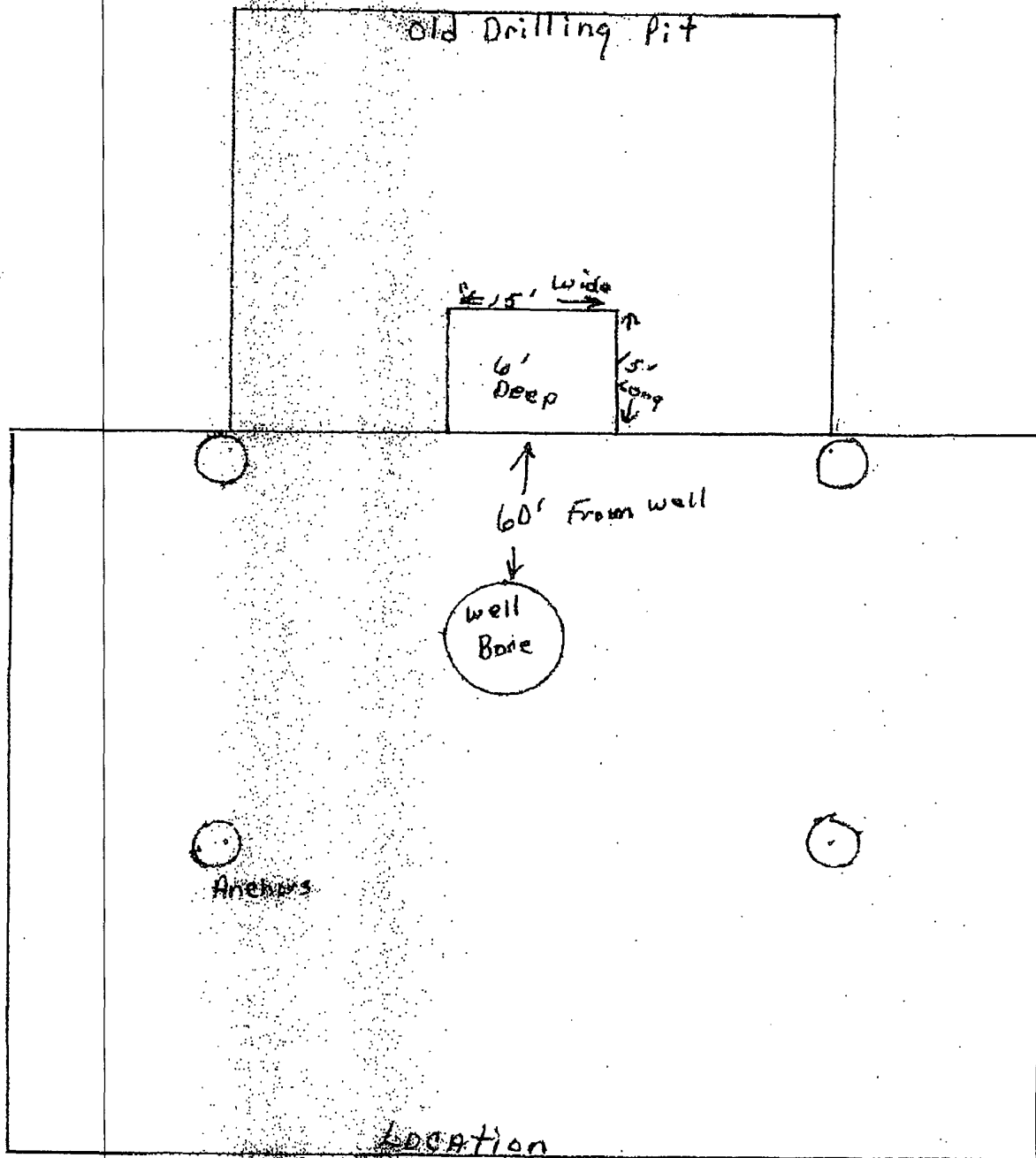


Figure "C"

Built with Backhoe  
15' X 15' X 6'  
Long - wide - Deep





MYCO INDUSTRIES, INC.  
OIL PRODUCERS  
POST OFFICE BOX 840  
ARTESIA, NEW MEXICO 88211-0840  
Phone (505) 748-1471

September 14, 2004

**Via Hand Delivery**

New Mexico Oil Conservation Division  
Bryan Arant  
1301 W. Grand  
Artesia, New Mexico 88210

RECEIVED

SEP 14 2004

OGD-ARTESIA

Re: Myco Industries, Inc.  
Salt Draw 15 State Com #1  
H2S Contingency Plan

Dear Mr. Arrant:

Sources at Myco Industries, Inc. have relayed information to me that they believe there will not be enough H2S found from the surface through the Morrow Formation to meet the OCD's minimum requirements for the submission of a contingency plan per Rule 118.

Please note that I have enclosed our Contingency Plan for this well based on a remote chance that Rule 118 might become applicable.

Thank you,

MYCO INDUSTRIES, INC.

*A.N. Muncy, PELS*

A.N. Muncy, PELS  
Operations/Engineering Manager

ANM:hp  
Enclosure

# **Myco Industries, Inc.**

**423 W. Main Street  
Artesia, NM 88210**

## **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

### **Salt Draw 15 State Com #1**

**660' FNL, 660' FEL  
Sec-15, T-25S, R-28E  
Eddy County NM**

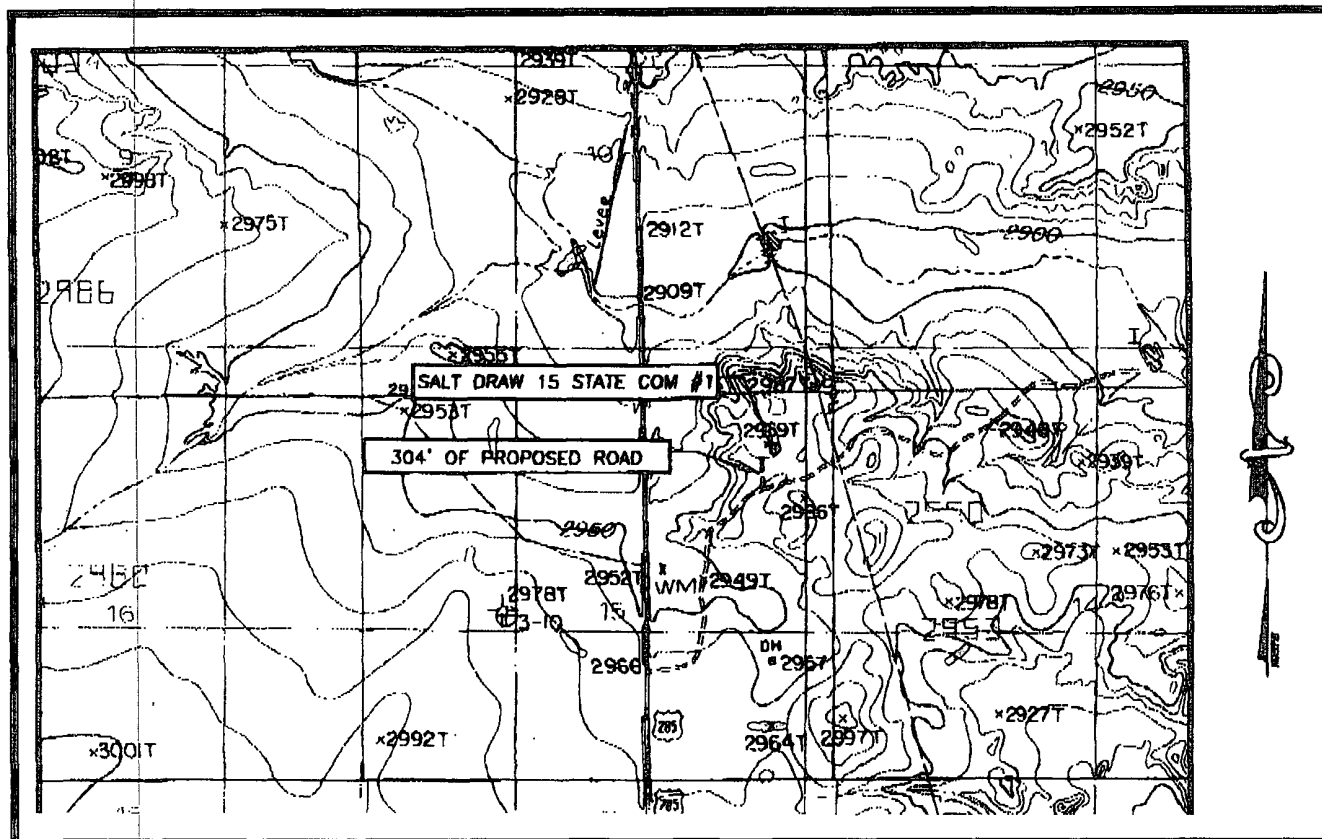
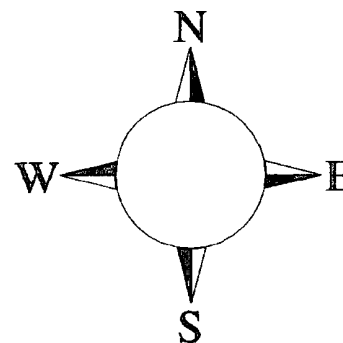
**RECEIVED**

**SEP 14 2004**

**OCID-ARTESIA**

## Salt Draw 10 State Com #1 Location

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



**Assumed 100 ppm ROE = 3000'**

**100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.**



## **Emergency Procedures**

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

## **Ignition of Gas Source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## **Characteristics of H<sub>2</sub>S and SO<sub>2</sub>**

<b>Common Name</b>	<b>Chemical Formula</b>	<b>Specific Gravity</b>	<b>Threshold Limit</b>	<b>Hazardous Limit</b>	<b>Lethal Concentration</b>
<b>Hydrogen Sulfide</b>	<b>H<sub>2</sub>S</b>	<b>1.189 Air = 1</b>	<b>10 ppm</b>	<b>100 ppm/hr</b>	<b>600 ppm</b>
<b>Sulfur Dioxide</b>	<b>SO<sub>2</sub></b>	<b>2.21 Air = 1</b>	<b>2 ppm</b>	<b>N/A</b>	<b>1000 ppm</b>

## **Contacting Authorities**

Myco personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Myco Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

## ***Myco Industries, Inc. Phone Numbers***

---

Myco Office .....(505) 748-4280  
Nelson Muncy/Operations Engineering Manager.....(505) 748-4289  
.....(505) 308-3502  
Craig Bailey/Field Engineer .....(505) 748-4289  
.....(505) 308-3414  
Artesia Answering Service .....(505) 748-4302  
(During non-office hours)

### **Agency Call List**

#### **Eddy County (505)**

##### **Artesia**

State Police..... 746-2703  
City Police..... 746-2703  
Sheriff's Office ..... 746-9888  
Ambulance ..... 911  
Fire Department ..... 746-2701  
LEPC (Local Emergency Planning Committee) ..... 746-2122  
NMOCD..... 748-1283

##### **Carlsbad**

State Police..... 885-3137  
City Police..... 885-2111  
Sheriff's Office ..... 887-7551  
Ambulance ..... 911  
Fire Department ..... 885-2111  
LEPC (Local Emergency Planning Committee)..... 887-3798  
US Bureau of Land Management.....887-6544

New Mexico Emergency Response Commission (Santa Fe) (505)476-9600  
24 HR .....(505) 827-9126  
New Mexico State Emergency Operations Center.....(505) 476-9635  
National Emergency Response Center (Washington, DC) ...(800) 424-8802

##### **Other**

Boots & Coots IWC .....1-800-256-9688 or (281) 931-8884  
Cudd Pressure Control.....(915) 699-0139 or (915) 563-3356  
Halliburton .....(505) 746-2757  
B. J. Services.....(505) 746-3569

Flight For Life -4000 24th St, Lubbock, TX .....(806) 743-9911  
Aerocare -Rr 3 Box 49f, Lubbock, TX .....(806) 747-8923  
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....(505) 842-4433  
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM .....(505) 842-4949