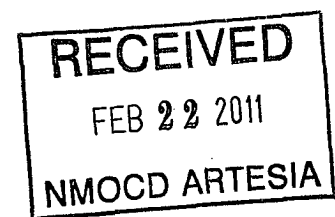


30-015-38531

**MURCHISON OIL & GAS, INC.**

**HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN  
FOR DRILLING/COMPLETING/WORKOVER/FACILITY  
WITH THE EXCEPTION OF H<sub>2</sub>S IN EXCESS OF 100 PPM**

**MURCHISON OIL & GAS, INC.  
NEW DRILL WELL  
FROSTY FEDERAL COM #2H  
SL: 950' FNL & 250' FEL, UNIT A  
BHL: 990' FNL & 330' FWL, UNIT D  
SEC 26, T16S, R27E  
EDDY COUNTY, NEW MEXICO**



**This well/facility is not expected to have H<sub>2</sub>S, but the following is submitted as requested.**

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## **I. GENERAL H2S EMERGENCY ACTIONS**

In the event of any evidence of H2S emergency, the following plan will be initiated:

1. All personnel will immediately evacuate to an upwind, and if possible, uphill "Safe Area."
2. If for any reason a person must enter the hazardous area, they must wear a SCBA (self-contained breathing apparatus).
3. Always use the "Buddy System."
4. Isolate the well/problem if possible.
5. Account for all personnel.
6. Display the proper colors warning all unsuspecting personnel of the danger at hand.
7. Contact the company representative as soon as possible, if not at the location (use the enclosed call list as instructed.)

At this point, the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of emergency response agencies and residents.

## **II. EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H2S**

1. All personnel will don the self-contained breathing apparatus (SCBA).
2. Remove all personnel to the "safe area," always use the buddy system.
3. Contact company representative if not on location.
4. Set in motion the steps to protect and/or remove the general public to any upwind "safe area." Maintain strict security and safety procedures while dealing with the source.
5. No entry to any unauthorized personnel.
6. Notify the appropriate agencies:

City Police - City Streets  
State Police - State Roads  
County Sheriff - County Roads

7. Call the NMOCD.

If at this time the supervising person determines the release of H2S cannot be contained to the site location and the general public is in harm's way, he will immediately notify public safety personnel.

### **III. EMERGENCY CALL LIST**

	<b>OFFICE</b>	<b>CELL</b>	<b>HOME</b>
<b>ARNOLD NALL</b>	972-931-0700	214-415-3010	972-596-8504
<b>TOMMY FOLSOM</b>	575-628-3932	575-706-0667	575-885-3474
<b>RANDY FORD</b>	432-682-0440	432-599-2222	432-684-4334

### **IV. EMERGENCY RESPONSE NUMBERS**

Eddy County, New Mexico

State Police	888-442-6677
Eddy County Sheriff – Carlsbad	575-396-3611
Eddy County Emergency Management – Carlsbad	575-887-7551
State Emergency Response Center (SERC)	575-476-9620
Artesia Police/Fire/Ambulance Department	575-746-5000
New Mexico Oil Conservation Division – Artesia	575-748-1283
Callaway Safety Equipment, Inc.	575-392-2973

### **V. PROTECTION OF THE GENERAL (ROE) RADIUS OF EXPOSURE**

In the event greater than 100 ppm H<sub>2</sub>S is present, the ROE calculations will be done to determine if the following conditions exist and whether the Plan must be activated:

- 100 ppm at any public area (any place not associated with this site).
- 500 ppm at any public road (any road the general public may travel).
- 100 ppm radius of 3000' will be assumed if there is insufficient data to do the calculations, and there is a reasonable expectation that H<sub>2</sub>S could be present in concentrations greater than 100 ppm in the gas mixture.

**Calculation for the 100 ppm ROE:**

**(H<sub>2</sub>S concentrations in decimal form)**

$$ROE = [(1.589)(H_2S \text{ concentration})(Q)] (^{0.6258})$$

$$10,000 \text{ ppm} = 0.1$$

$$1,000 \text{ ppm} = .001$$

**Calculation for the 500 ppm ROE:**

**(H<sub>2</sub>S concentrations in decimal form)**

$$ROE = [(0.4546)(H_2S \text{ concentration})(Q)] (^{0.6258})$$

$$100 \text{ ppm} = .0001$$

$$10 \text{ ppm} = .00001$$

**EXAMPLE:** If a well/facility has been determined to have 650 ppm H<sub>2</sub>S in the gas mixture and the well/facility is producing at a gas rate of 200 MCFD, then:

$$ROE \text{ for } 100 \text{ ppm} \quad ROE = [(1.589)(.00065)(200,000)] (^{0.6258}) \quad ROE = 28.1'$$

$$ROE \text{ for } 500 \text{ ppm} \quad ROE = [(0.4546)(.00065)(200,000)] (^{0.6258}) \quad ROE = 12.8'$$

These calculations will be forwarded to the appropriate NMOCD district office when applicable.

## **VI. PUBLIC EVACUATION PLAN**

When the supervisor has determined that the general public will be involved, the following plan will be implemented:

1. Notification of the emergency response agencies of the hazardous condition and implement evacuation procedures.
2. A trained person in the H2S safety shall monitor with detection equipment the H2S concentration, wind and area of exposure. This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. All monitoring equipment shall be UL approved for use in Class I Groups A, B, C, & D, Division I hazardous locations. All monitors will have a minimum capability of measuring H2S, oxygen, and flammable values.
3. Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.
4. The company representative shall stay in communication with all agencies throughout the duration of the situation and inform such agencies when the situation has been contained and the affected area is safe to enter.

## **VII. PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION**

The decision to ignite a well should be a last resort with one, if not both, of the following conditions:

1. Human life and/or property are endangered.
2. There is no hope of bringing the situation under control with the prevailing conditions at the site.

### **Instructions for Igniting the Well:**

1. Two people are required. They must be equipped with positive pressure, self contained breathing apparatus and "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.
2. One of the people will be a qualified safety person who will test the atmosphere for H2S, oxygen and LFL. The other person will be the designated company representative.
3. Ignite upwind from a distance no closer than necessary. Make sure that the ignition site has the maximum escape avenue available. A 25mm flare gun with a range of approximately +/- 500 feet shall be used to ignite the gas.
4. Before igniting, check for the presence of combustible gases.
5. After igniting, continue emergency actions and procedures as before.

## **VIII. REQUIRED EMERGENCY EQUIPMENT**

### **1. Breathing Apparatus**

- Rescue Packs (SCBA) – 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- Work/Escapes Packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
- Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.

### **2. Signage and Flagging**

- One Color Code Condition Sign will be placed at the entrance to the site, reflecting the possible conditions at the site.
- A Colored Condition flag will be on display reflecting the condition at the site at that time.

### **3. Briefing Area**

- Two perpendicular areas will be designated by signs and readily accessible.

### **4. Windsocks**

- Two windsocks will be placed in strategic locations, visible from all angles.

### **5. H2S Detectors and Alarms**

- The stationary detector with three (3) sensors will be placed in the upper doghouse if equipped, set to visually alarm @ 10 ppm and audible alarm @ 15 ppm. Calibrate a minimum of every 30 days or as needed. The three sensors will be placed in the flowing places: (Gas sample tubes will be stored in the safety trailer):
  - Rig floor
  - Bell Nipple
  - End of flow line or where well bore fluid is being discharged.

### **6. Auxiliary Rescue Equipment**

- Stretcher
- Two OSHA full body harnesses
- 100' of 5/8" OSHA approved rope
- One 20 lb. Class ABC fire extinguisher
- Communication via cell phones on location and vehicles on location.

## **IX. USING SELF-CONTAINED BREATHING AIR EQUIPMENT (SCBA)**

1. SCBA should be worn when any of the following are performed:
  - Working near the top or on top of a tank.
  - Disconnecting any line where H2S can reasonably be expected.
  - Sampling air in the area to determine if toxic concentrations of H2S exist.
  - Working in areas where over 10 ppm of H2S has been detected.
  - At any time there is a doubt of the level of H2S in the area.
2. All personnel shall be trained in the use of SCBA prior to working in a potentially hazardous location.
3. Facial hair and standard eyeglasses are not allowed with SCBA.
4. Contact lenses are never allowed with SCBA.
5. When breaking out any line where H2S can reasonably be expected.
6. After each use, the SCBA unit shall be cleaned, disinfected, serviced and inspected.
7. All SCBA shall be inspected monthly.

## **X. RESCUE & FIRST AID FOR VICTIMS OF H2S POISONING**

- Do not panic.
- Remain calm and think.
- Put on breathing apparatus.
- Remove the victim to the safe breathing area as quickly as possible, upwind and uphill from source or crosswind to achieve upwind.
- Notify emergency response personnel.
- Provide artificial respiration and/or CPR as necessary.
- Remove all contaminated clothing to avoid further exposure.
- A minimum of two (2) personnel on location shall be trained in CPR and First Aid.

## **XI. TOXIC EFFECTS OF H2S POISONING**

Hydrogen Sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 PPM, which is .001% by volume. Hydrogen Sulfide is heavier than air (specific gravity – 1.192) and is colorless and transparent. Hydrogen Sulfide is almost as toxic as Hydrogen Cyanide and is 5-6 times more toxic than Carbon Monoxide. Occupational exposure limits for Hydrogen Sulfide and other gasses are compared below in Table 1. Toxicity table for H2S and physical effects are shown in Table II.

**Table 1**  
Permissible Exposure Limits of Various Gasses

Common Name	Symbol	Sp. Gravity	TLV	STEL	IDLH
Hydrogen Cyanide	HCN	.94	4.7 ppm	C	
Hydrogen Sulfide	H2S	1.192	10 ppm	15 ppm	100 ppm
Sulfide Dioxide	SO2	2.21	2 ppm	5 ppm	
Chlorine	CL	2.45	.5 ppm	1 ppm	
Carbon Monoxide	CO	.97	25 ppm	200 ppm	
Carbon Dioxide	CO2	1.52	5000 ppm	30,000 ppm	
Methane	CH4	.55	4.7% LEL	14% UEL	

### **Definitions**

- A. **TLV** – Threshold Limit Value is the concentration employees may be exposed to based on a TWA (time weighted average) for eight (8) hours in one day for 40 hours in one (1) week. This is set by ACGIH (American Conference of Government Hygienists) and regulated by OSHA.
- B. **STEL** – Short Term Exposure Limit is the 15 minute average concentration an employee may be exposed to providing that the highest exposure never exceeds the OEL (Occupation Exposure Limit). The OEL for H2S is 19 PPM.
- C. **IDLH** – Immediately Dangerous to Life and Health is the concentration that has been determined by the ACGIH to cause serious health problems or death if exposed to this level. The IDLH for H2S is 100 PPM.
- D. **TWA** – Time Weighted Average is the average concentration of any chemical or gas for an eight (8) hour period. This is the concentration that any employee may be exposed to based on a TWA.

**Table II**  
Toxicity Table of H2S

Percent %	PPM	Physical Effects
.0001	1	Can smell less than 1 ppm.
.001	10	TLV for 8 hours of exposure.
.0015	15	STEL for 15 minutes of exposure.
.01	100	Immediately Dangerous to Life and Health. Kills sense of smell in 3-5 mins.
.02	200	Kills sense of smell quickly, may burn eyes and throat.
.05	500	Dizziness, cessation of breathing begins in a few minutes.
.07	700	Unconscious quickly, death will result if not rescued promptly.
.10	1000	Death will result unless rescued promptly. Artificial resuscitation may be necessary.

## **XII. PHYSICAL PROPERTIES OF H<sub>2</sub>S**

The properties of all gases are usually described in the context of seven (7) major categories:

**COLOR**  
**ODOR**  
**VAPOR DENSITY**  
**EXPLOSIVE LIMITS**  
**FLAMMABILITY**  
**SOLUBILITY (IN WATER)**  
**BOILING POINT**

Hydrogen Sulfide is no exception. Information from these categories should be considered in order to provide a fairly complete picture of the properties of the gas.

### **COLOR – TRANSPARENT**

Hydrogen Sulfide is colorless, so it is invisible. This fact simply means that you cannot rely on your eyes to detect its presence, a fact that makes the gas extremely dangerous to be around.

### **ODOR – ROTTEN EGGS**

Hydrogen Sulfide has a distinctive offensive smell, similar to “rotten eggs.” For this reason, it earned its common name “sour gas.” However, H<sub>2</sub>S, even in low concentrations is so toxic that it attacks and quickly impairs a victim’s sense of smell, so it could be fatal to rely on your nose as a detection device.

### **VAPOR DENSITY – SPECIFIC GRAVITY OF 1.192**

Hydrogen Sulfide is heavier than air so it tends to settle in low-lying areas like pits, cellars or tanks. If you find yourself in a location where H<sub>2</sub>S is known to exist, protect yourself. Whenever possible, work in an area upwind and keep to higher ground.

### **EXPLOSIVE LIMITS – 4.3% to 46%**

Mixed with the right proportion of air or oxygen, H<sub>2</sub>S will ignite and burn or explode, producing another alarming element of danger besides poisoning.

### **FLAMMABILITY**

Hydrogen Sulfide will burn readily with a distinctive clear blue flame, producing Sulfur Dioxide (SO<sub>2</sub>), another hazardous gas that irritates the eyes and lungs.

### **SOLUBILITY – 4 to 1 RATIO WITH WATER**

Hydrogen Sulfide can be dissolved in liquids, which means that it can be present in any container or vessel used to carry or hold well fluids including oil, water, emulsion, and sludge. The solubility of H<sub>2</sub>S is dependent on temperature and pressure, but if conditions are right, simply agitating a fluid containing H<sub>2</sub>S may release the gas into the air.

### **BOILING POINT – (-76° degrees Fahrenheit)**

Liquefied Hydrogen Sulfide boils at a very low temperature, so it is usually found in gas.



**SURFACE USE AND OPERATIONS PLAN FOR  
DRILLING, COMPLETION, AND PRODUCING**

Murchison Oil & Gas, Inc.  
Frosty Federal Com #2H  
SHL: 950' FNL & 250' FEL, UNIT A  
BHL: 990' FNL & 330' FWL, UNIT D  
Sec 26, T16S, R27E  
Eddy County, New Mexico

**LOCATED**

Approximately 12 miles north/northwest of Loco Hills, New Mexico.

**OIL & GAS LEASE**

SHL: LS# NM NM 120349  
BHL: LS# NM NM 114347

**BOND COVERAGE**

NM 2163

**POOL**

Empire; Wolfcamp, Northwest

**OIL & GAS RECORD LESSEE**

Lessee: Murchison Oil & Gas, Inc., 1100 Mira Vista Blvd., Plano, TX 75093  
Operating Rights: Murchison Oil & Gas, Inc., 1100 Mira Vista Blvd., Plano, TX 75093

**SURFACE OWNER**

Bureau of Land Management

**MINERAL OWNER**

Bureau of Land Management

**GRAZING TENANT**

Bogle Ltd Co. LLC, P.O. Box 460, Dexter, NM 88230 (575) 433-3500

**EXHIBITS**

A (Form C-102)	Well Location & Acreage Dedication Plat
B	Topographic & Location Verification Map
C	Area Road Map
C-1 & C-2	Vicinity Oil & Gas Map
D	Proposed Lease Road
E	Drilling Rig Layout
F	BOPE Schematic
G	Choke Manifold Schematic

This well will be drilled to a BHL of approximately 6,162' TVD, and approximately 10,747' MD.

**EXISTING ROADS**

Exhibit A (Form C-102) is a portion of a section map showing the location of the proposed well as staked.

Exhibit C is a map showing existing roads in the vicinity of the proposed well site.

Directions to well location: From the intersection of U.S. Hwy. #82 and Co. Rd. #202 (Southern Union), go north-northeast approximately 4.2 miles; then go northwest approximately 2.2 miles; then go east approximately 0.2 miles; then go north approximately 0.8 miles. The location stake is approximately 150 feet west (Exhibit D).

**ACCESS ROADS**

**Length and Width**

Proposed access road is approximately 7.4 miles of existing road which is approximately 15 feet wide (Exhibit D). Murchison Oil & Gas, Inc. has agreements with the surface owners for right-of-way up to proposed lease road and for the additional lease road to proposed well.

**Surface Material**

Six inches of caliche and water, compacted and graded.

**Maximum Grade**

Less than three percent

**Turnouts**

None needed

**Drainage Design**

N/A

**Culverts**

None needed

**Gates and Cattle Guards**

None required

**LOCATION OF EXISTING WELLS**

The locations of existing wells in Section 26 are shown on Exhibit C-1 and C-2.

**LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

Necessary production facilities for this well will be located on the well pad.

**LOCATION AND TYPE OF WATER SUPPLY**

It is planned to drill the proposed well with a cut-brine water system. The water will be obtained from either a private water well owner or a commercial source and will either be piped to location from a nearby water well or will be hauled to location by truck over existing and proposed lease roads as shown on Exhibit D.

**SOURCE OF CONSTRUCTION MATERIALS**

Caliche required for the construction of the location pad and access road will be obtained from caliche on the location or from the nearest BLM-approved pit.

### **METHODS OF HANDLING WASTE DISPOSAL**

All drilling fluid will be circulated over shaker(s) with cuttings discharged into roll off container.

Fluid and fines below shaker(s) will be circulated with transfer pump through centrifuge(s) or solids separator with cuttings and fines discharged into roll off container.

Fluid will be continuously re-circulated through equipment with polymer added to aid separation of cutting fines.

Roll-off containers will be lined and de-watered with fluids re-circulated into system.

Additional tank will be used to capture unused drilling fluid or cement returns from casing jobs.

This equipment will be maintained by solids control personnel and/or rig crews on location.

Cuttings will be hauled to one of the following, depending on which rig is available to drill well:

CRI (permit number R9166)  
or  
GMI (permit number 711-019-001)

### **ANCILLARY FACILITIES**

None required.

### **WELL SITE LAYOUT**

Exhibit F shows the relative location and dimensions of the well pad, mud pits, cuttings containers and trash pit, and the location of major rig components. Operator requests V-door be positioned to the East, and the steel pits located to the North.

The ground surface at the drilling location is essentially flat.

A Closed-Loop System will be used.

The pad area has been staked and flagged.

### **PLANS FOR RESTORATION OF THE SURFACE**

After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleared of all trash and junk to leave the site in an as aesthetically pleasing condition as possible.

Any unguarded pits containing fluids will be fenced until they are filled.

If the proposed well is non productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible.

**OTHER INFORMATION**

**Topography**

The land surface at the well site is small, rolling hills.

**Soil**

Loamy soil shallow to caliche and raw Gypsum.

**Flora and Fauna**

The vegetation consists of creosote, mesquite, yucca, prickly pear, Mormon tea, cane cholla, pencil cholla, horse crippler and various grasses. Faunal species include pronghorn antelope, mule deer, coyote, badger, rabbits, and various snakes, small mammals, birds and reptiles.

**Ponds and Streams**

There are no rivers, lakes, ponds, or streams in the area.

**Residences and Other Structures**

There are no residences within one mile of the proposed well site.

**Archaeological, Historical, and Cultural sites**

An Archaeological Survey has been sent to the BLM Office.

**Land Use**

Grazing

**OPERATOR'S REPRESENTATIVES**

Arnold Nall  
1100 Mira Vista Blvd.  
Plano, TX 75093-4698  
Office Phone: (972) 931-0700  
Cell Phone: (214) 415-3010

Randy Ford  
415 W. Wall Street, Suite 1700  
Midland, TX 79701  
Office Phone: (432) 682-0440  
Cell Phone: (432) 559-2222

**Murchison Oil & Gas, Inc.**  
**Frosty Federal Com #2H**  
**SL: 950' FNL & 250' FEL, UNIT A**  
**BHL: 990' FNL & 330' FWL, UNIT D**  
**Sec 26, T16S, R27E**  
**Eddy County, New Mexico**

**CERTIFICATION**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Murchison Oil & Gas, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date

4/30/10

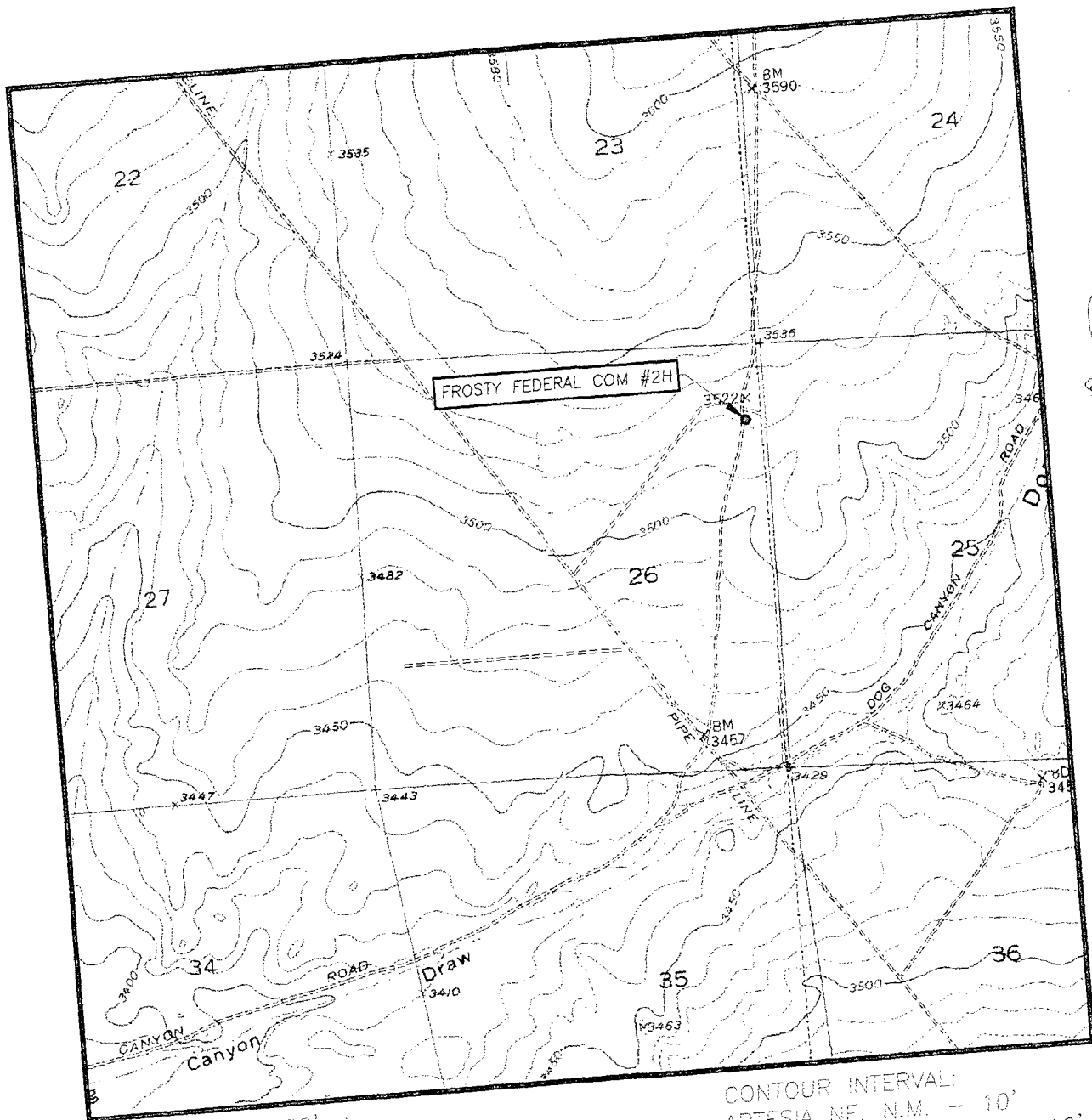
  
Arnold Nall

VP, Operations

Murchison Oil & Gas, Inc.

EXHIBIT B

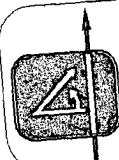
# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
ARTESIA NE, N.M. - 10'  
DIAMOND MOUND, N.M. - 10'

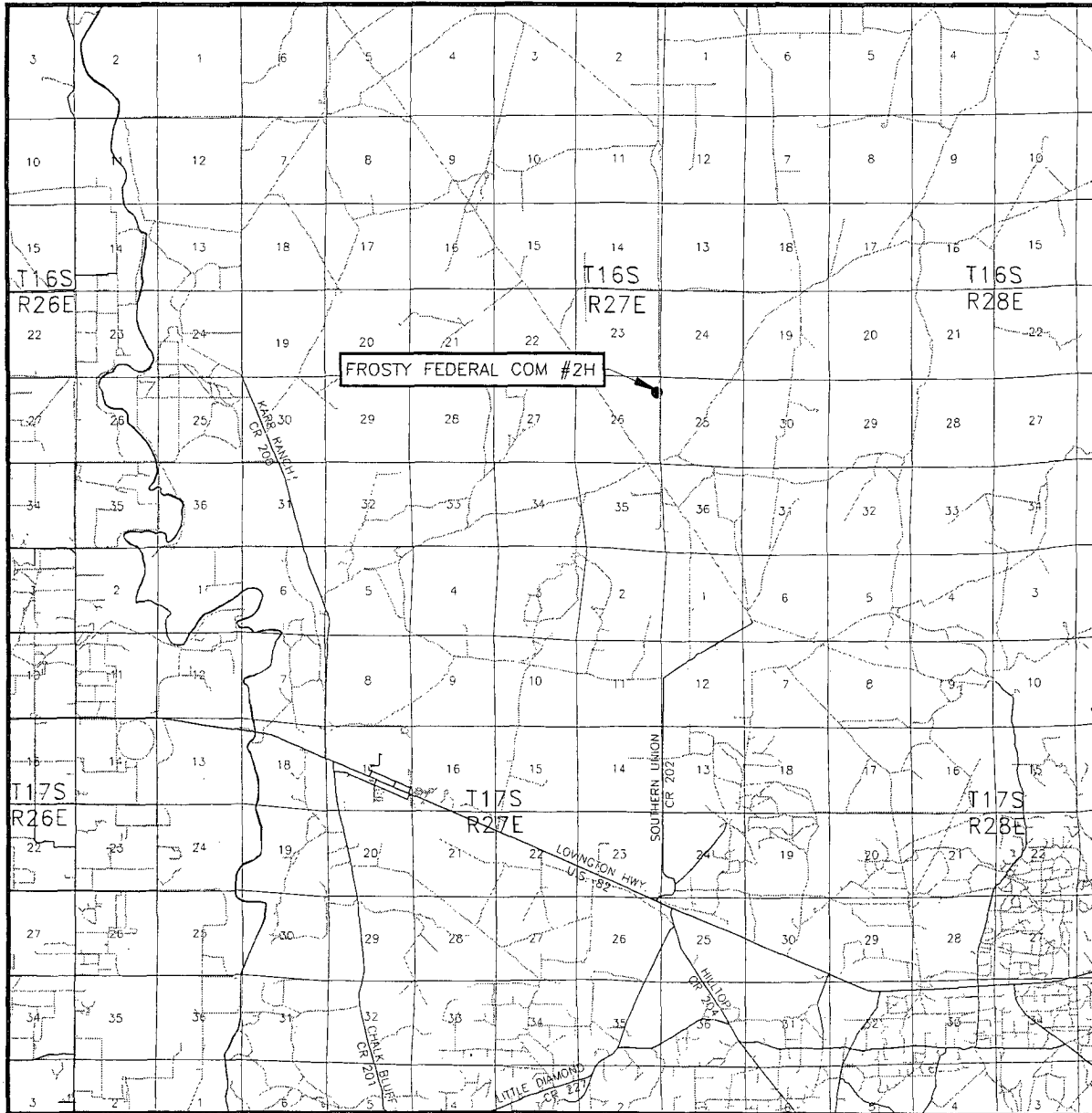
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SURVEY \_\_\_\_\_ N.M.P.M.  
COUNTY EDDY STATE NEW MEXICO  
DESCRIPTION 950' FNL & 250' FEL  
ELEVATION 3518'  
OPERATOR MURCHISON  
OIL & GAS, INC.  
LEASE FROSTY FEDERAL COM  
U.S.G.S. TOPOGRAPHIC MAP  
ARTESIA NE, N.M.



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

EXHIBIT C

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 26 TWP. 16-S RGE. 27-E

SURVEY N.M.P.M.

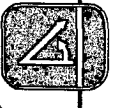
COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 950' FNL & 250' FEL

ELEVATION 3518'

OPERATOR MURCHISON OIL & GAS, INC.

LEASE FROSTY FEDERAL COM



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

EXHIBIT C-1

Turkey Track Rd



Frosty Federal Com #2H



Carbon Valley 26 Fed Com #1H

Southern Union

Southern Union

Chase Rd

Chase Rd

Chase Rd

Chase Rd

82

Lovington Hwy

82

Red Line Rd



EXHIBIT C-2



Frosty Federal Com #2H

Carbon Valley 26 Fed Com #1H

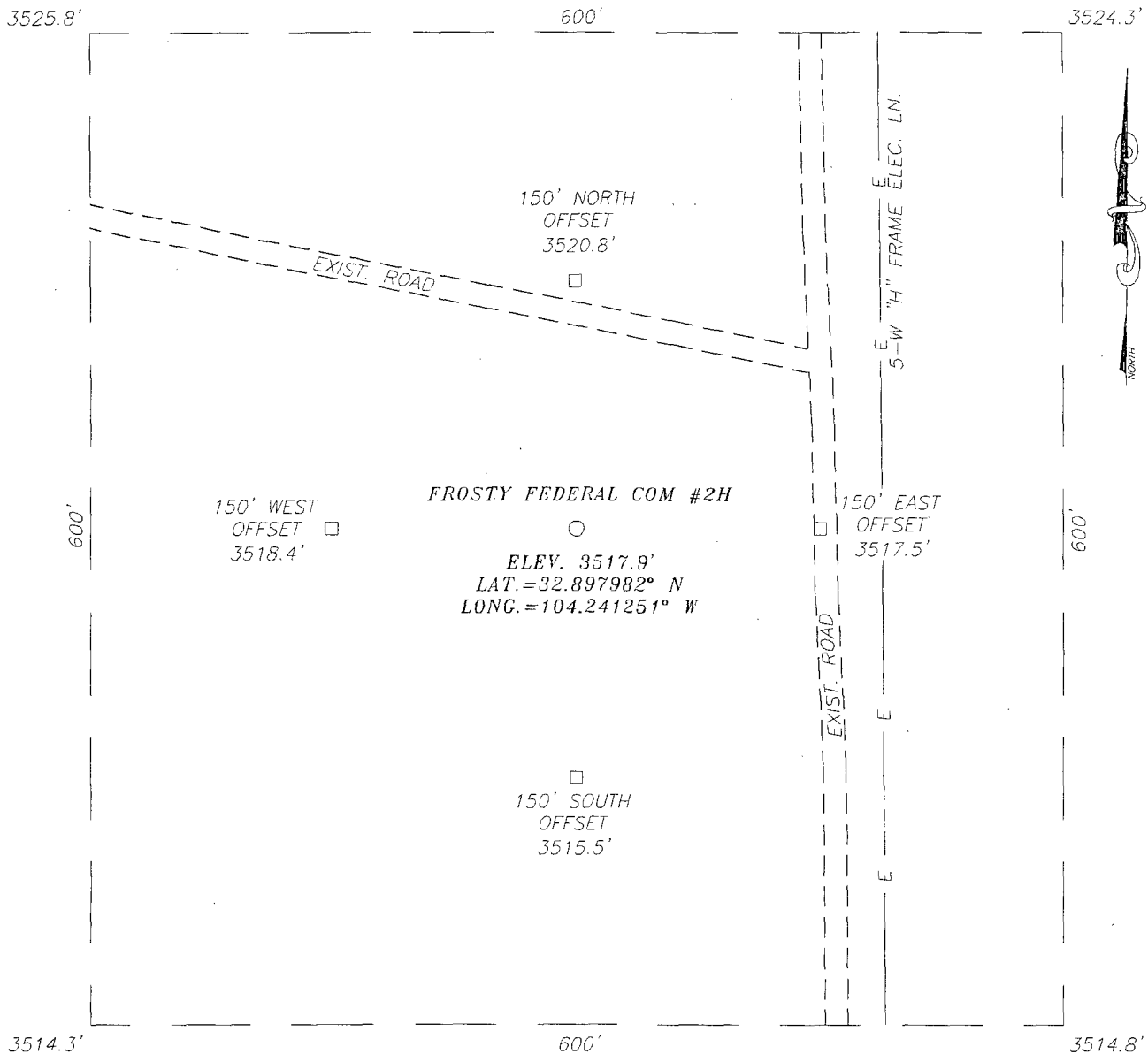
82

Washington Hwy

82

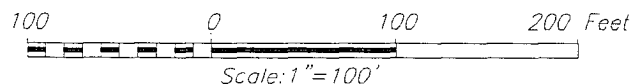
# EXHIBIT D

## SECTION 26, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO



### DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. #202 (SOUTHERN UNION), GO NORTH-NORTHEAST APPROX. 4.2 MILES. GO NORTHWEST APPROX. 2.2 MILES. GO EAST APPROX. 0.2 MILES. GO NORTH APPROX. 0.8 MILES. THE LOCATION STAKE IS APPROX. 150 FEET WEST.



## MURCHISON OIL & GAS, INC.

FROSTY FEDERAL COM #2H WELL  
LOCATED 950 FEET FROM THE NORTH LINE  
AND 250 FEET FROM THE EAST LINE OF SECTION 26,  
TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

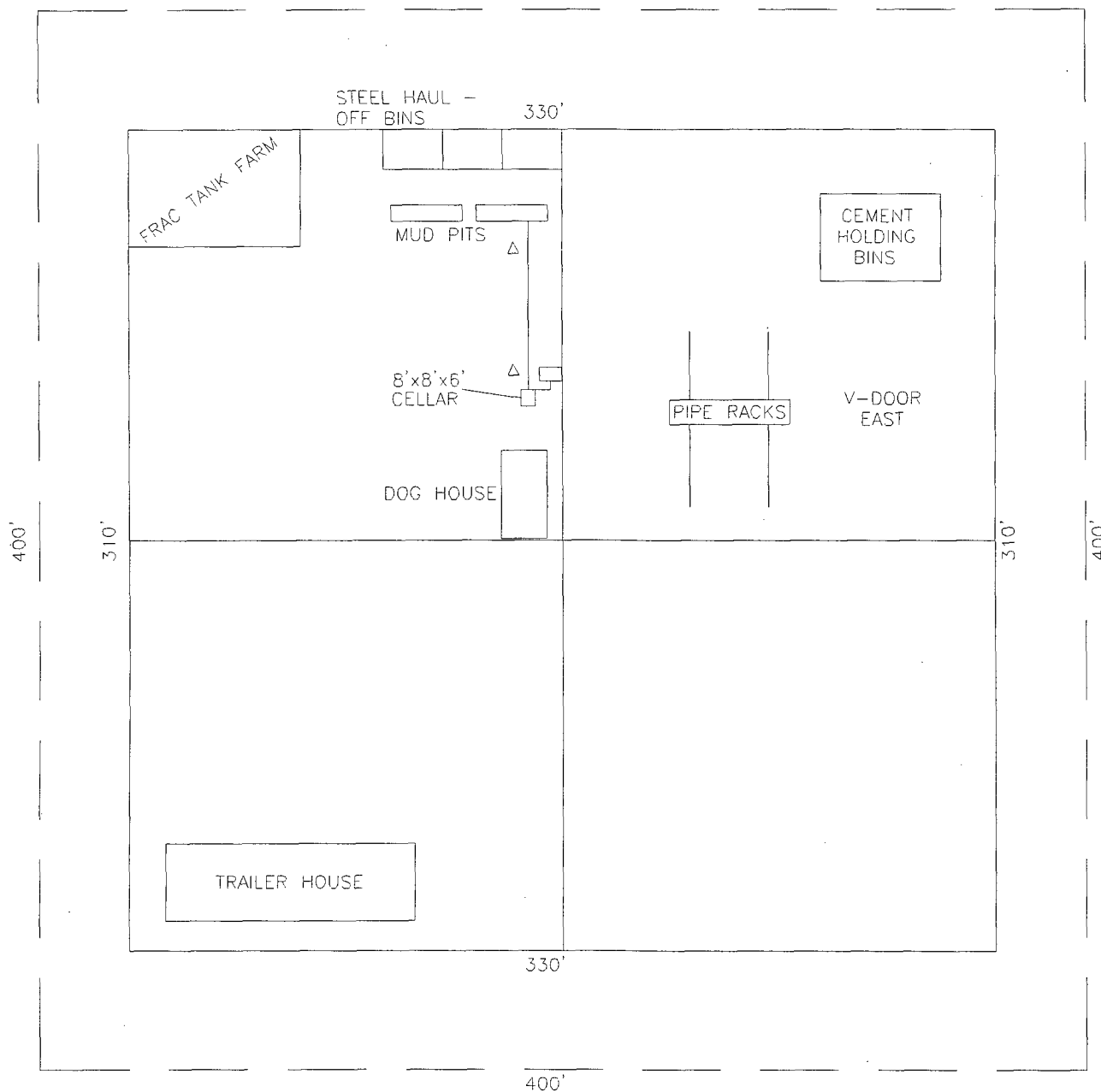
Survey Date: 10/22/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.1580	Dr By: LA
Date: 11/3/10	10111580
	Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

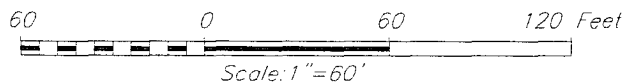
# EXHIBIT E

SECTION 26, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



MURCHISON OIL & GAS, INC.  
FROSTY FEDERAL COM #2H  
ELEV. 3517.9'

GEODETIC COORDINATES  
NAD 27 NME  
Y=690409.8 N  
X=528263.3 E  
LAT.=32.897982° N  
LONG.=104.241251° W



## MURCHISON OIL & GAS, INC.

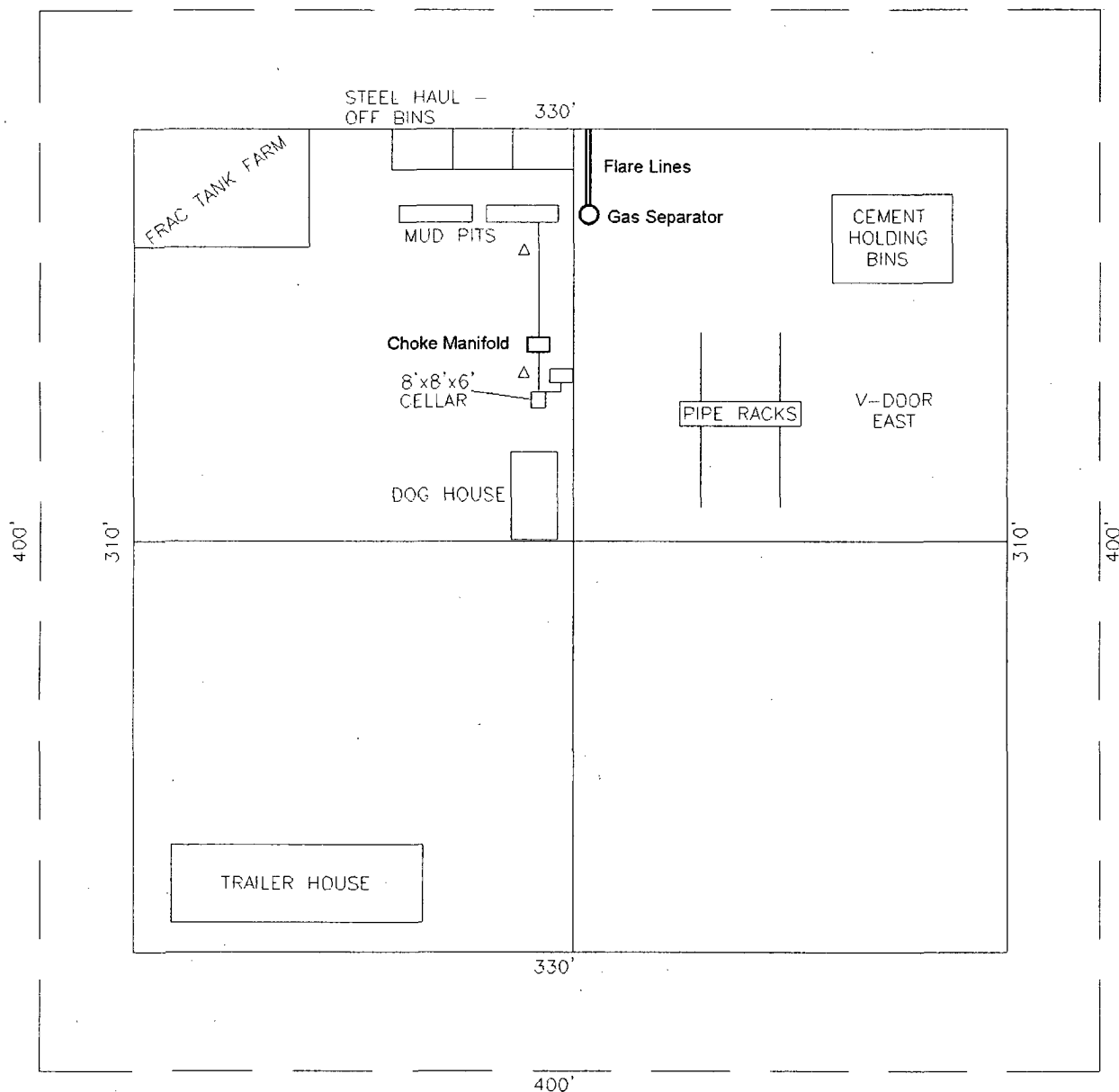
FROSTY FEDERAL COM #2H WELL  
LOCATED 950 FEET FROM THE NORTH LINE  
AND 250 FEET FROM THE EAST LINE OF SECTION 26,  
TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

Survey Date: 10/22/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.1580	Dr By: LA
Date: 11/3/10	10111580 Scale: 1"=100'



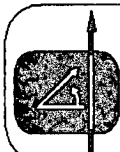
PROVIDING SURVEYING SERVICES  
SINCE 1946  
JOHN WEST SURVEYING COMPANY  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

SECTION 26, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



MURCHISON OIL & GAS, INC.  
FROSTY FEDERAL COM #2H  
ELEV. 3517.9'

GEODETIC COORDINATES  
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PROVIDING SURVEYING SERVICES  
SINCE 1946  
JOHN WEST SURVEYING COMPANY  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

60 0 60 120 Feet  
Scale: 1"=60'

**MURCHISON OIL & GAS, INC.**

FROSTY FEDERAL COM #2H WELL  
LOCATED 950 FEET FROM THE NORTH LINE  
AND 250 FEET FROM THE EAST LINE OF SECTION 26,  
TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

Survey Date: 10/22/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.1580	Dr By: LA Rev 1: N/A
Date: 11/3/10	10111580 Scale: 1"=100'

Handwritten initials/signature

