

Manzano, LLC**HYDROGEN SULFIDE DRILLING OPERATIONS PLAN****I. HYDROGEN SULFIDE TRAINING**

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H₂S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

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

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

- A. Well Control Equipment:
All BOP and BOP equipment is shown in the attachments.
Flare line.
Choke manifold and remotely operated chokes.
Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
- B. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- C. H₂S detection and monitoring equipment:
2 - Portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
- D. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate.

- E. Mud Program: The mud program has been designed to minimize the volume of H₂S circulated to the surface

- F. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

- G. Communication:
Company vehicles equipped with cellular telephone.

W A R N I N G

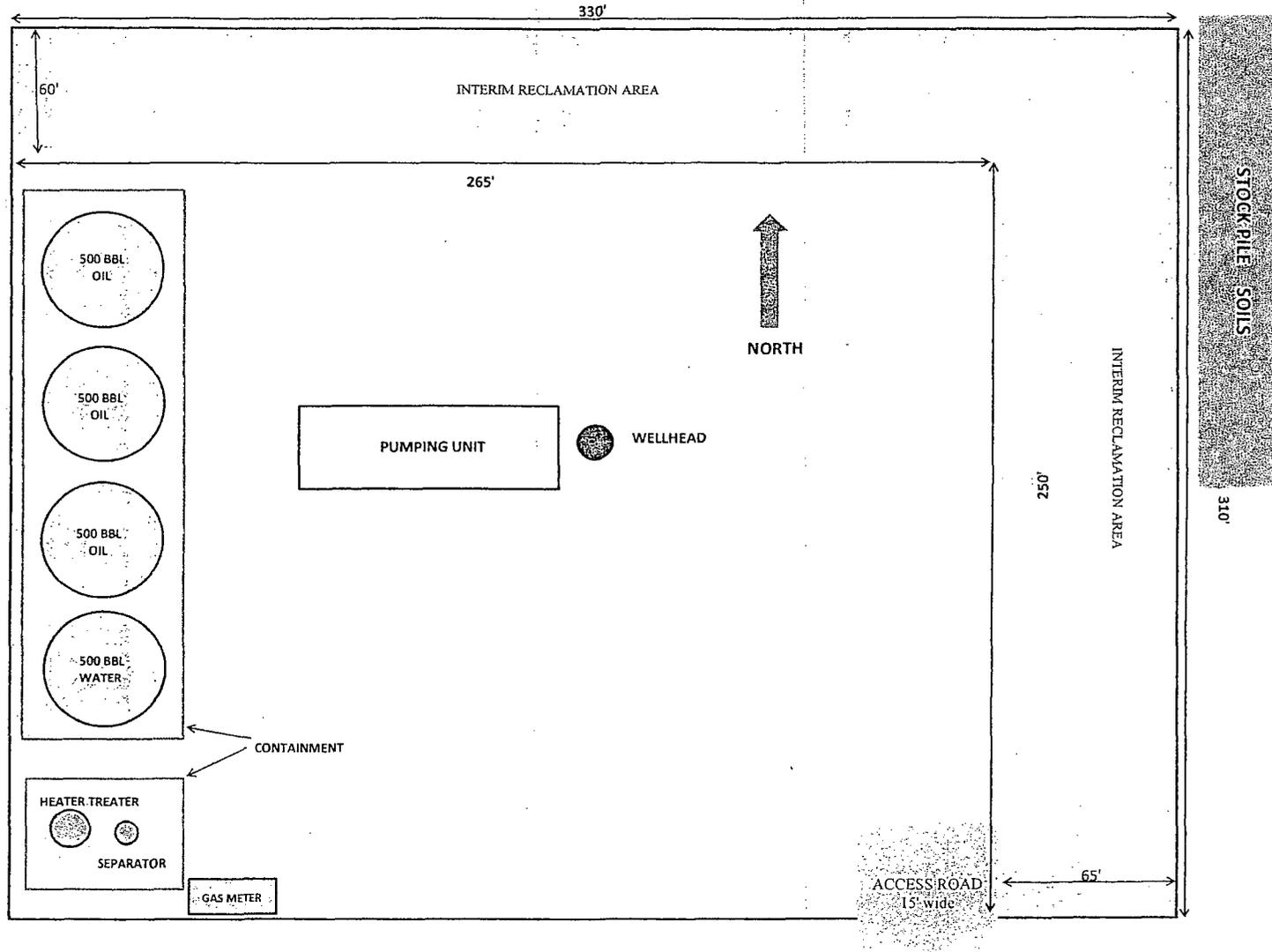
**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

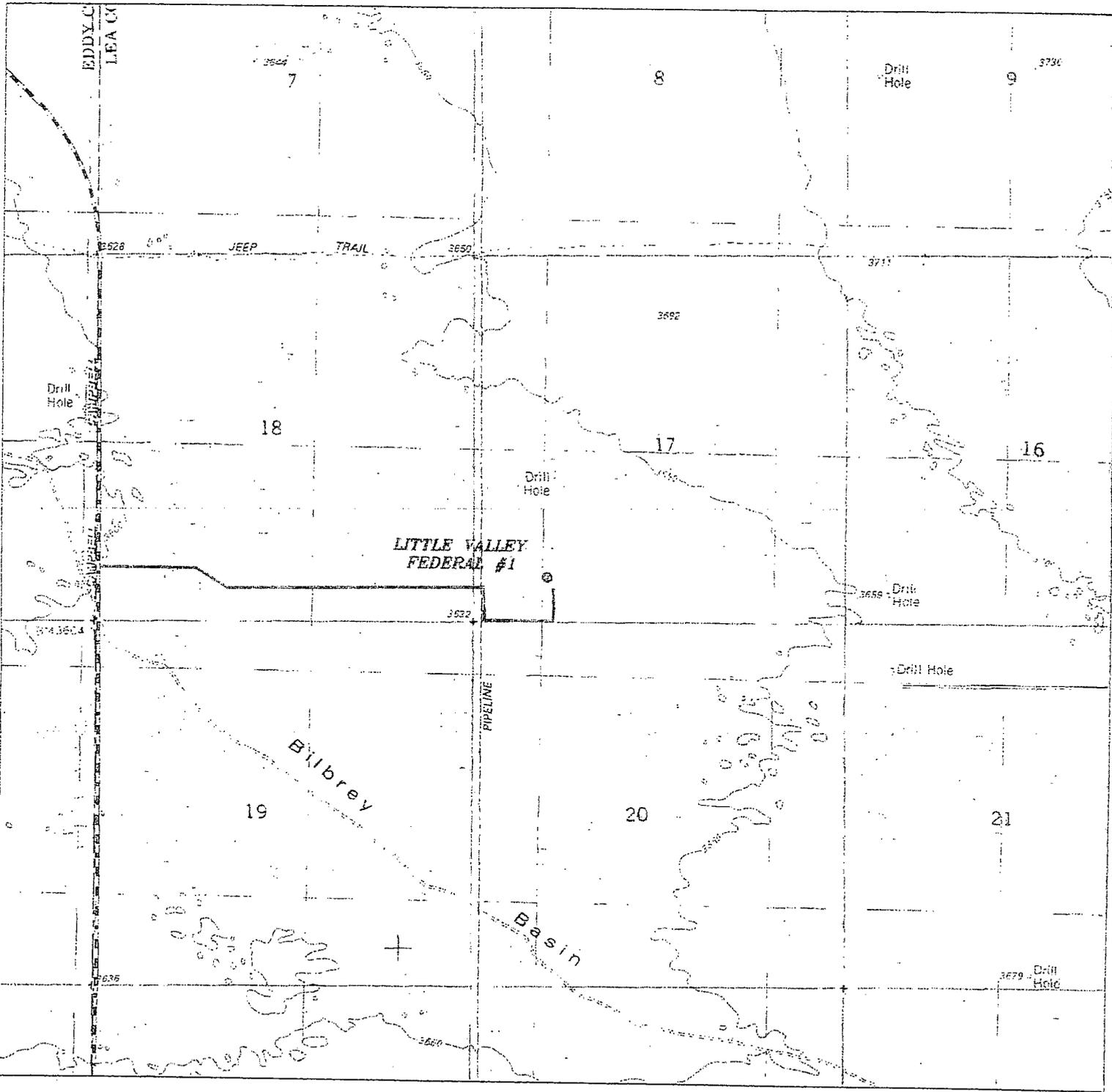
- 1. BEARDS OR CONTACT LENSES NOT ALLOWED***
- 2. HARD HATS REQUIRED***
- 3. SMOKING IN DESIGNATED AREAS ONLY***
- 4. BE WIND CONSCIOUS AT ALL TIMES***
- 5. CK WITH MANZANO FOREMAN AT MAIN OFFICE***

Manzano, LLC

575-623-1996

MANZANO, LLC
SURFACE USE PLAN - EXHIBIT 4
PRODUCTION FACILITIES and INTERIM RECLAMATION PLAN FOR LITTLE VALLEY FEDERAL #1





LITTLE VALLEY FEDERAL #1

located 190° 45' and 100° 45'
 Section 17 Township 21 South Range 32 East
 N.M.P.M. New Mexico, New Mexico.

VICINITY MAP

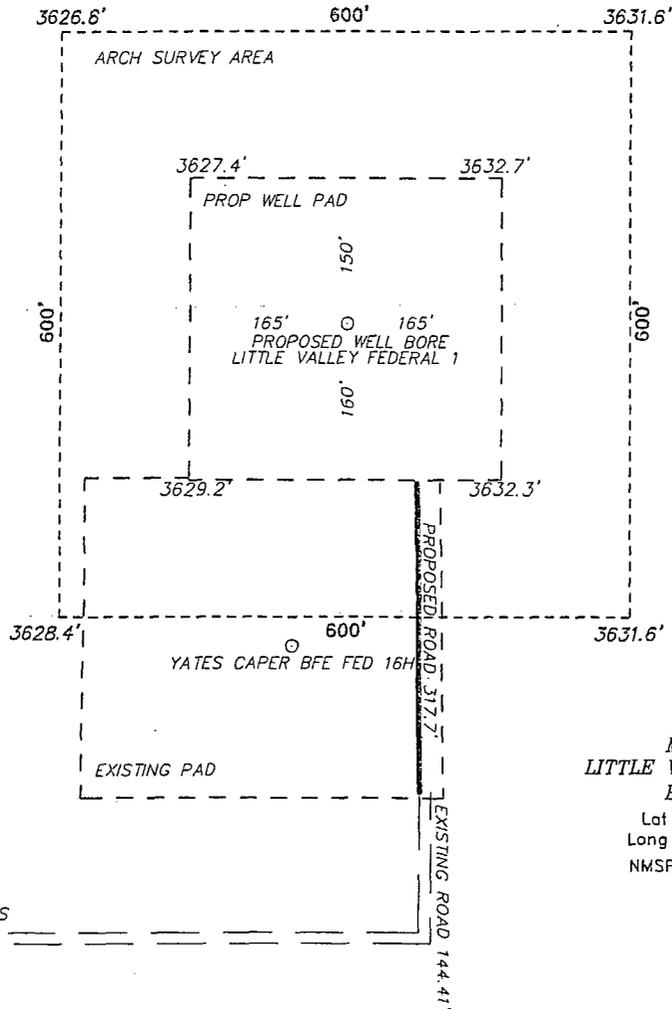
Basin surveys

MANZANO, LLC
 1211 West 10th St.
 Albuquerque, NM 87102
 505-261-1111

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SURFACE USE PLAN
MANZANO, LLC
Exhibit 1

Section 17, TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

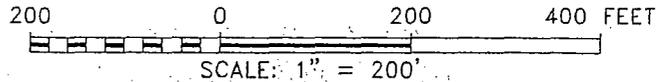


MANZANO, LLC
LITTLE VALLEY FEDERAL #1H
ELEV. - 3632'
Lat - N 32°28'23.67"
Long - W 103°42'07.40"
NMSPCE - N 536471.8
E 736015.9
(NAD-83)

EXISTING ROAD 0.3 MILES

**SURFACE USE PLAN
EXHIBIT 2**

CARLSBAD, NM IS ±38 MILES TO THE NORTHWEST OF LOCATION.



FROM THE JUNCTION OF 62-180 AND CAMPBELL, GO SOUTH ON CAMPBELL FOR 5.7 MILES TO LEASE ROAD, GO EAST ON LEASE ROAD FOR 1.0 MILES TURNING SOUTH 0.3 MILES TO PROPOSED LOCATION.

ASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

J. Number: 29260 Drawn By: K. NORRIS

e: 08-22-2013 Disk: KAN 29260

MANZANO, LLC	
REF: LITTLE VALLEY FEDERAL #1H / WELL PAD TOPO	
THE LITTLE VALLEY FEDERAL #1H LOCATED 660' FROM THE SOUTH LINE AND 1050' FROM THE WEST LINE OF SECTION 17, TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.	
Survey Date: 08-21-2013	Sheet 1 of 1 Sheets

h. Oil
49P
-3231

10/19

Three Rivers
Acquis.
2-1-2023

U.S., MI

D.C. Derry III, enovis

XTO Ener
(Geodyne)

Yates Pet. 14320
D/Srland - 14320

(Texas)
No. Gregory
Aloha Disc
+ P&H
+ P&H

Yates Pet. Fed. (27Mll)

NO. Burrey Fed
U.S.

Lobos En

Hogues and Corp, to INATZ
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BHL

Collins & Stone
ML Fed.

U.S.

XTO ENER
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U.S., MI
Spartan, S

1/2 mile RADIIUS

Yates Pet. et al
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320.00

SWD
Yates Pet
Union Fed.
TO R610
D/A/114-93

Yates Pet et al
12-1-2004
94095
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Todd et al
4/1/1950B
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17

Little Valley

5 DFE

Chevron
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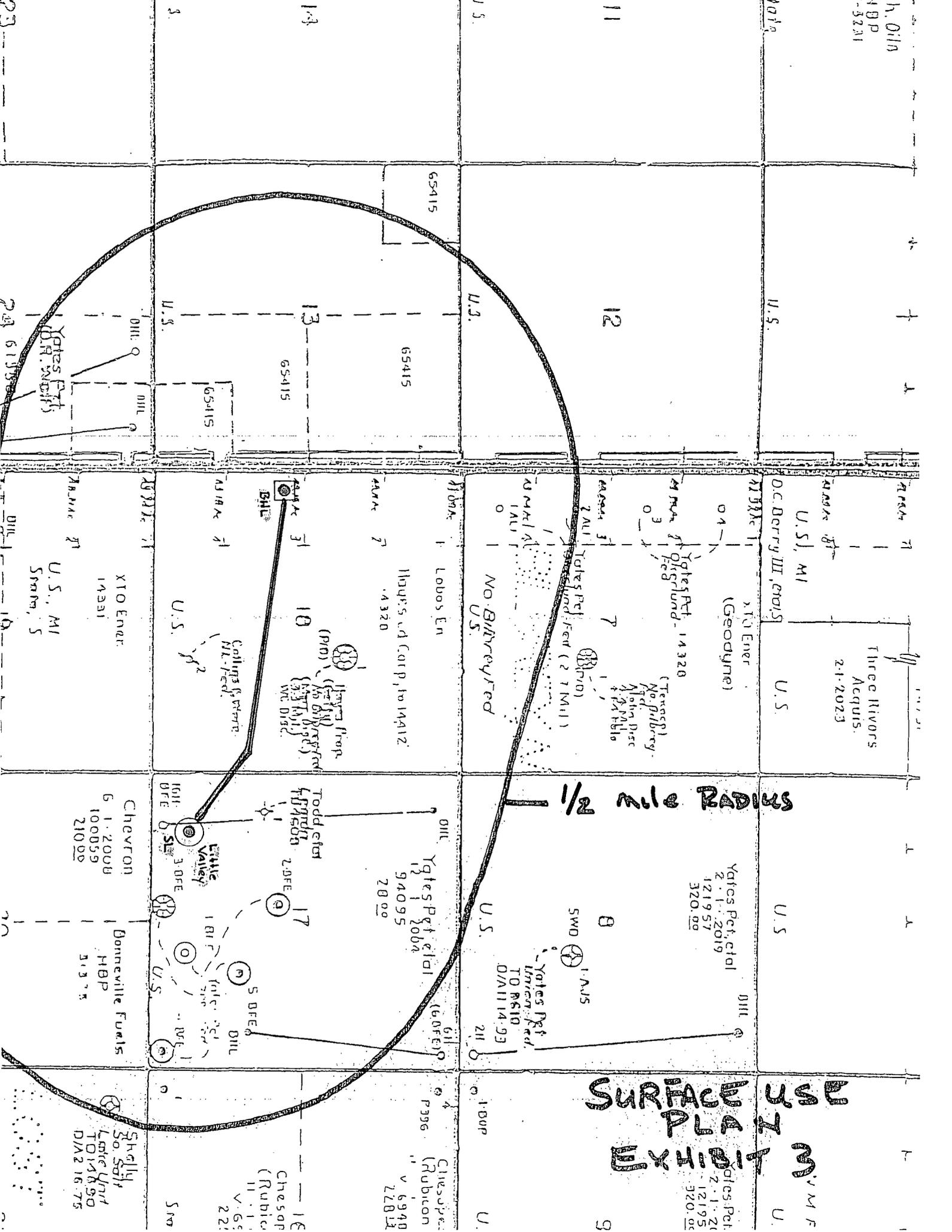
Donneville Fuels
HBP
5-3-73

WV M F
SURFACE
WV M F

Yates Pet.
2-1-2019
121957
320.00

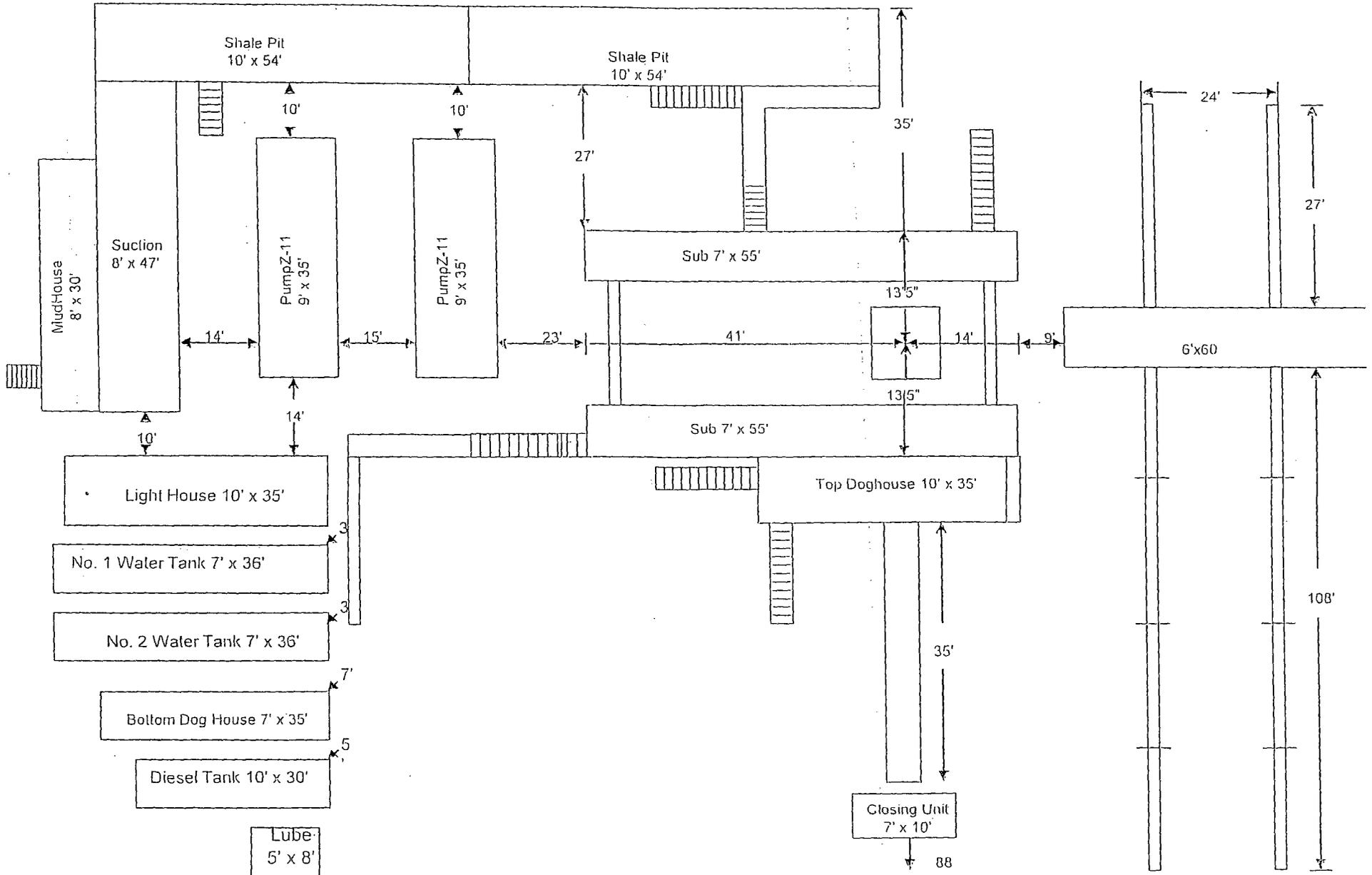
Chesop
(Rubicon
11-1-11
V. 65
222

Shelly
So Soil
Latre Unit
TO 14890
D/A2 16-75



McVay Drilling Rig No. 8

SURFACE USE PLAN
EXHIBIT 5



McVay Drilling Rig No. 8

SURFACE USE PLAN EXHIBIT 5

