

30-015-39543

MURCHISON OIL & GAS, INC.
SURFACE USE AND OPERATIONS PLAN

Rock Ridge Federal #3H
SL: 1520' FNL & 350' FEL, UNIT H
BHL: 1650' FNL & 330' FWL, UNIT E
Sec 30, T24S, R29E
Eddy County, New Mexico



This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above-described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operations so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING AND PLANNED ROADS

EXISTING ROADS:

- a. The well site and elevation plat for the proposed well are reflected on Form C-102: Well Location and Acreage Dedication Plat. The well was staked by Madron Surveying, Inc.
- b. Exhibits C-1 -- C-3 are portions of a topo map and an aerial map showing the proposed well site and roads in the vicinity of the proposed location. The proposed well site and the access route to the location are indicated in red on Exhibits C-2 and C-3.
- c. Exhibits B-2 -- B-7 are section plats showing the existing roadway that will be used to access the lease from McDonald Road (CR #746). Murchison Oil & Gas, Inc. will submit a Form SF-299 to request Right of Way using this proposed route.
- d. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

DIRECTIONS:

From U.S. Hwy 285 and paved CR 720 (Duarte) go east on CR 720 1.3 miles. Turn right on paved CR 746 (McDonald) and go south 0.8 miles. Bend left and go east 2.0 miles. Turn right on caliche lease road and go south 0.9 miles. Location is 251' on left (southeast).

PLANNED ACCESS ROAD:

Exhibit B-1 is a portion of a section map showing a proposed access road approximately 158 feet, trending southeast from existing caliche lease road to southwest corner of well pad.

- a. The maximum width of the running surface will be 14'. The road will be crowned, ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4' wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and be consistent with local drainage patterns.
- b. The average grade will be less than 1%.
- c. No turnouts are planned.
- d. No culverts, cattle guards, gates, low water crossings, or fence cuts are necessary.
- e. Surfacing material will consist of native caliche which will be obtained from the actual well site if available. If not available on site, caliche will be hauled from the nearest BLM caliche pit.

2. LOCATION OF EXISTING WELLS

Exhibit D shows all existing wells within a one-mile radius of the proposed well site.

3. LOCATION OF EXISTING/PROPOSED FACILITIES

If the well is productive:

- a. Pumping equipment and tank battery facilities including all flowlines and piping will be installed according to API specifications.
- b. If electricity is needed, power will be obtained from Central Valley Electric, and they will submit a separate plan and ROW for service to the well location.

- c. Original topsoil from the well site will be returned to the location, and the site will be re-contoured as close as possible to the original state.

4. **LOCATION AND TYPE OF WATER SUPPLY**

The well will be drilled using a combination of water mud systems as outlined in the Drilling Program. The water will be obtained from commercial water stations in the area and hauled to the location by transport truck using the existing and proposed roads shown in Exhibits C-1 – C-3. If a commercial fresh water source is nearby, fast line may be laid along existing road ROWs and fresh water pumped to the well. No water well will be drilled on the location.

5. **SOURCE OF CONSTRUCTION MATERIALS**

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM-approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche.

6. **METHODS OF HANDLING WASTE MATERIAL**

- a. The well will be drilled using a closed loop system – see Exhibit H.
- b. 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.
- c. Roll-off containers will be lined and de-watered with fluids re-circulated into system.
- d. Drill cuttings will be hauled to one of the following, depending on which rig is available for drilling:
 - CRI (permit number NM-01-0006)
 - GMI (permit number NM-01-0019)
- e. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOCD-approved commercial disposal facility.
- f. Garbage and trash produced during drilling or completion operations will be collected in trash cages or trash bins and hauled to an approved landfill.
- g. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days.

7. **ANCILLARY FACILITIES**

No campsite or other facilities will be constructed as a result of this well.

8. **WELL SITE LAYOUT**

- a. Exhibit E shows the proposed well site layout with dimensions of the pad layout.
- b. The ground surface at the well site is essentially flat.
- c. V Door direction is east.
- d. Topsoil, if available, will be stockpiled on the south side of the location until it is needed for interim reclamation.
- e. Exhibit E shows the proposed orientation of the closed loop system. No permanent living facilities are planned, but a temporary foreman/tool pusher's trailer will be on location during the drilling operations.

9. **PLANS FOR SURFACE RECLAMATION**

- a. Interim reclamation will take place after the well is completed. The pad will be downsized by reclaiming the areas not needed for production operations. The portions that are not needed for production operations will be re-contoured to its original state as much as possible. The caliche that is removed will be reused to either build another pad site or for road repairs within the lease. Any stockpiled topsoil will be spread over

reclaimed area and reseeded with a BLM-approved seed mixture. Exhibit F shows the final pad size after reclamation: 290' x 330'.

- b. Final reclamation will take place if the well is not productive. Upon plugging and abandoning the well, all caliche will be removed from the well pad and access road, and surface will be contoured to match the original topography as much as possible. Caliche will be recycled for road repair or reused for another well pad on the same lease. If any topsoil remains, it will be spread out and reseeded with a BLM-approved seed mixture.

10. **SURFACE OWNERSHIP**

- a. The surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface has multiple uses, primarily grazing of livestock and oil and gas production.
- b. The surface tenant for this site is: Scott or Valerie Branson, 1501 Mountain Shadow, Carlsbad, NM 80220

11. **OTHER INFORMATION**

- a. The project site is in a rolling desert scrubland punctuated by playa lakes and low limestone ridges. Vegetation is dominated by mesquite, broom snakeweed, saltbush, creosote, acacia, and various bunch grasses. Local soils are predominantly well-drained loamy, deep soils from recently mixed alluvium. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. The Queen Lake playa lies roughly ¼ mile to the northwest, but there are no significant hydrological features within or immediately near the project site.
- c. There are no dwellings within two miles of this location.
- d. A Cultural Resources Examination was conducted by Gary Navarre, Caprock Archaeological Investigations, on July 19, 2011. Mr. Navarre consulted (on-site) with Jim Renn, BLM Archaeologist, and John Fast, BLM Surface Protection Specialist.

12. **BOND COVERAGE:** NM2163

13. **OPERATOR'S REPRESENTATIVE:**

A. **Through APD Approval:**
Vicki Johnston, Regulatory Specialist
Gray Surface Specialties, Agent for
Murchison Oil & Gas, Inc.
3106 N. Big Spring, Suite 100
Midland, TX 79705
Phone: (281) 265-6874
Cell: (281) 468-2448

B. **Through Drilling Operations:**

Tommy Folsom, Operations
Murchison Oil & Gas, Inc.
406 N. Guadalupe St., #B
Carlsbad, NM 88220
Phone: (575) 628-3932
Cell: (575) 706-0667

Doug Dietrich, Drilling Engineer
Murchison Oil & Gas, Inc.
300 N. Marienfeld St.
Midland, TX 79701
Phone: (432) 686-2063
Cell: (432) 210-6190

Randy Ford, Drilling Supervisor
RK Ford & Associates
415 W. Wall St., Suite 1700
Midland, TX 79701
Phone: (432) 682-0440
Cell: (432) 599-2222

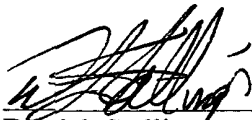
EXHIBITS

A	Form C-102 Well Location & Acreage Dedication Map
B-1 -- B-7	Proposed Access Road, Well Site, Existing Access Road
C-1 – C-3	Vicinity Map (Topographical), Location Verification Map, Aerial Map
D	One-Mile Radius Map
E	Proposed Well Pad Layout Map
F	Production Facilities and Interim Reclamation Map
G-1 – G-3	BOPE and Choke Manifold Schematics
H	Closed Loop System Diagram

**Murchison Oil & Gas, Inc.
Rock Ridge Federal #3H
SHL: 1520' FNL & 350' FEL, Unit H
BHL: 1650' FNL & 330' FWL, Unit E
Sec 30 T-24S R-29E
Eddy County, New Mexico**

OPERATOR 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. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.



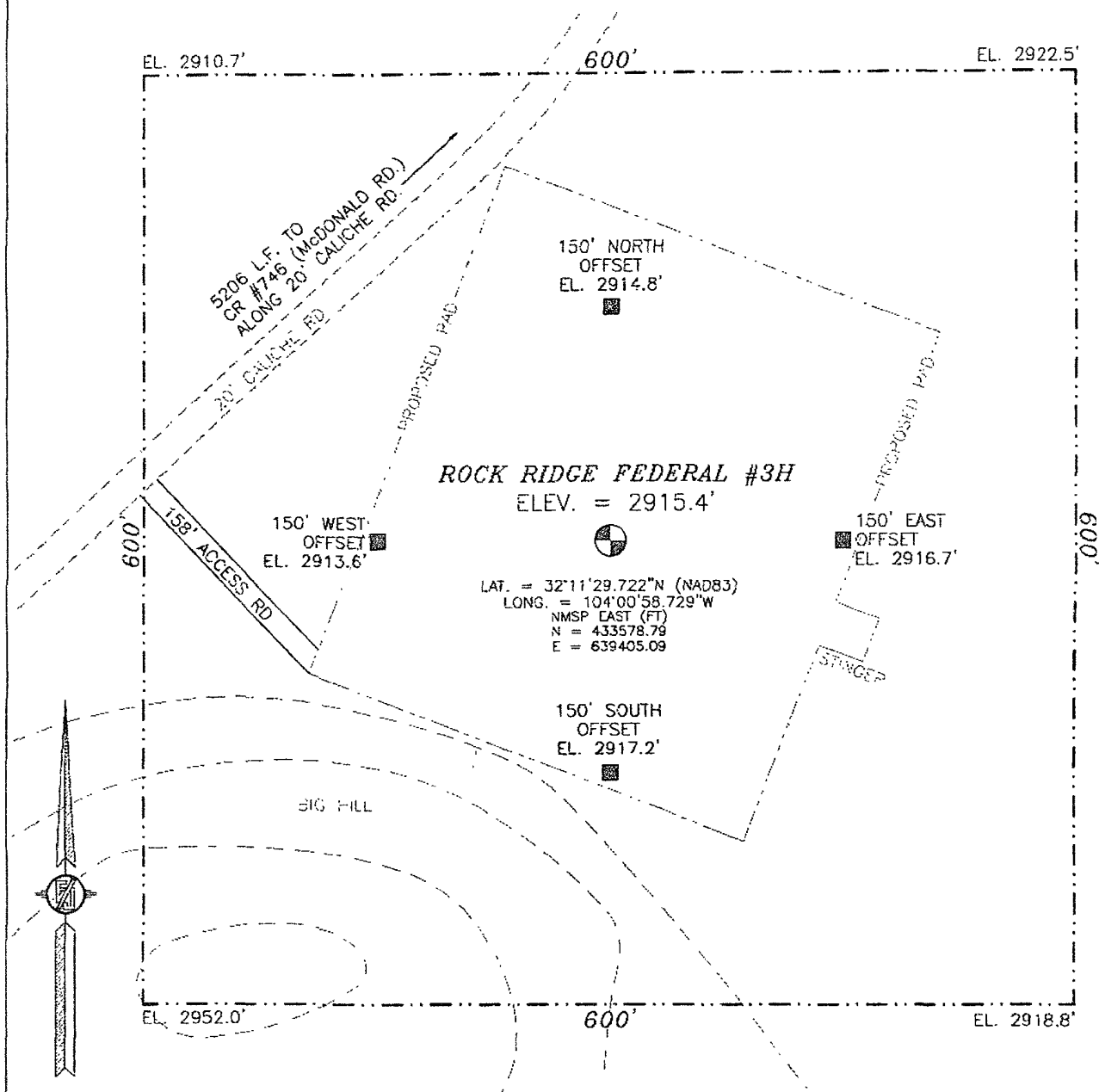
Darrick Stallings
Vice President, Operations
Murchison Oil & Gas, Inc.

8/3/11

Date

Office Phone: (972) 931-0700
Cell Phone: (817) 888-4765
E-mail: dstallings@jdmii.com

SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM U.S. HWY 285 AND PAVED CR #720 (DUARTE) GO EAST ON 720 1.3 MILES, TURN RIGHT ON PAVED CR #746 (McDONALD) AND GO SOUTH 0.8 MILES BEND LEFT AND GO EAST 2.0 MILES, TURN RIGHT ON CALICHE LEASE ROAD AND GO SOUTH 0.9 MILES, AND LOCATION IS 251' ON LEFT (SOUTHEAST).

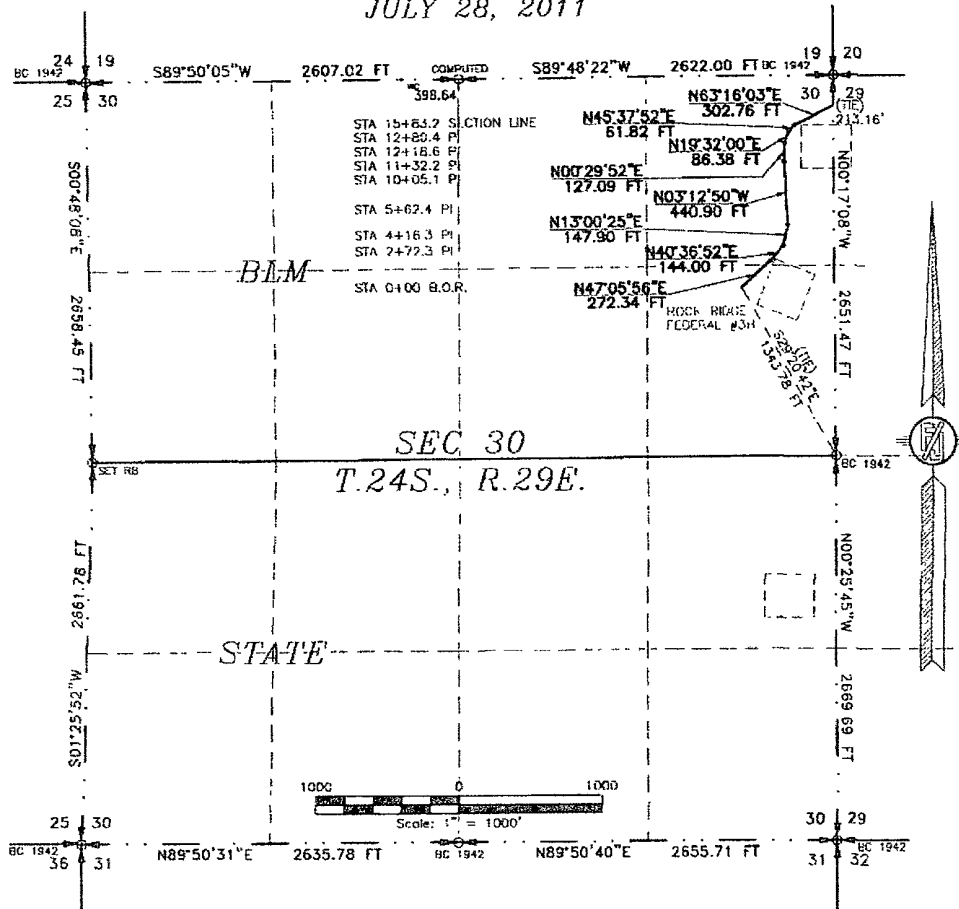
MURCHISON OIL & GAS, INC.
ROCK RIDGE FEDERAL #3H
LOCATED 1520 FT. FROM THE NORTH LINE
AND 350 FT. FROM THE EAST LINE OF
SECTION 30, TOWNSHIP 24 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SURVEY NO. 520B

JULY 13, 2011

MADRON SURVEYING, INC. 41 SOUTH CARL CARLSBAD, NEW MEXICO

MURCHISON OIL & GAS, INC.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
ACCESS TO ROCK RIDGE FEDERAL #3H
JULY 28, 2011



DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NE/4 SE/4 OF SAID SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE EAST QUARTER CORNER OF SAID SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S29°20'42"E, A DISTANCE OF 1343.78 FEET;
 THENCE N47°05'56"E A DISTANCE OF 272.34 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE N40°36'52"E A DISTANCE OF 144.00 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE N13°00'25"E A DISTANCE OF 147.90 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE N03°12'50"W A DISTANCE OF 440.90 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE N00°29'52"E A DISTANCE OF 127.09 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE N19°32'00"E A DISTANCE OF 86.38 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE N45°37'52"E A DISTANCE OF 61.82 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE N63°16'03"E A DISTANCE OF 302.76 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS N00°17'08"W, A DISTANCE OF 213.16 FEET;

SAID STRIP OF LAND BEING 1583.19 FEET OR 95.95 RODS IN LENGTH, CONTAINING 1.090 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIFIS AS FOLLOWS:

SE/4 NE/4	223.96 L.F.	13.57 RODS	0.154 ACRES
NE/4 NE/4	1358.23 L.F.	82.38 RODS	0.936 ACRES

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAN MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

WITNESS (WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO) THIS 28th DAY OF AUGUST 2011.

Filmon F. Jaramillo
 FILMON F. JARAMILLO, PLS. #12797
 501 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88202
 Phone (575) 706-5762

MADRON SURVEYING, INC.
 501 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88202
 Phone (575) 706-5762

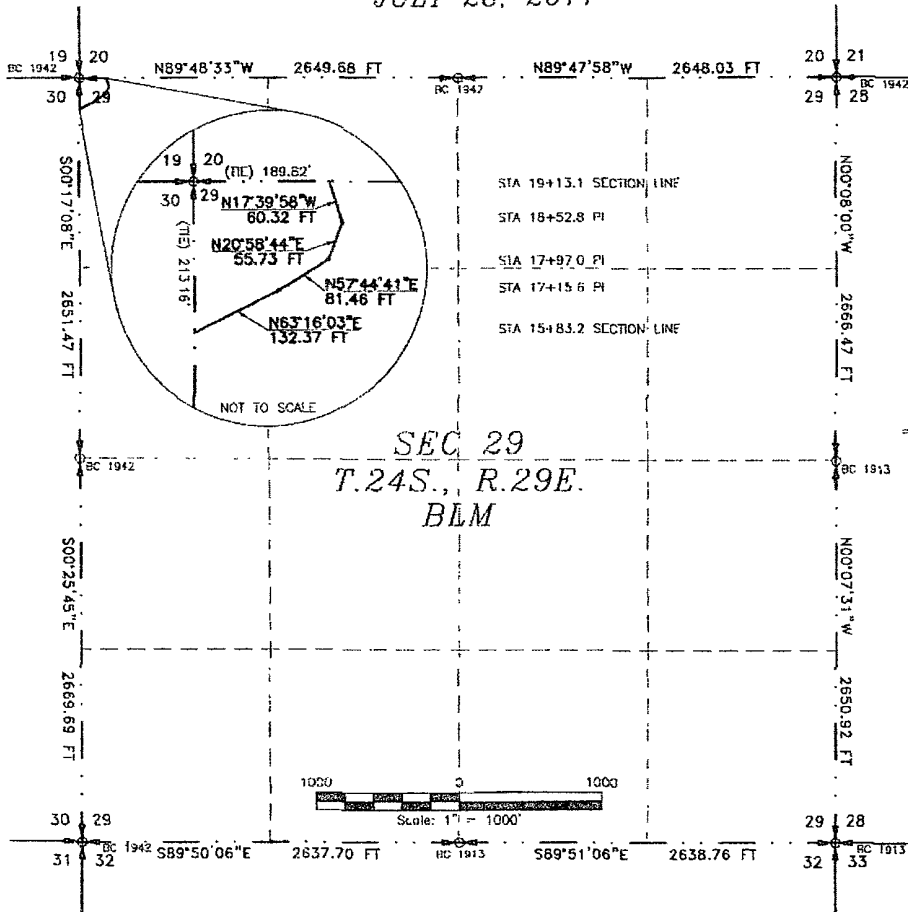
GENERAL NOTES

- 1) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2) BASIS OF BEARING IS NMSP EAST MODIFIED TO SURFACE COORDINATES.

SURVEY NO. 520C 1-6

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

MURCHISON OIL & GAS, INC.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 29, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
ACCESS TO ROCK RIDGE FEDERAL #3H
JULY 28, 2011



SEC 29
T.24S., R.29E.
BLM

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 29, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NW/4 NW/4 OF SAID SECTION 29, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE NORTHWEST CORNER OF SAID SECTION 29, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS N00°17'08"W, A DISTANCE OF 215.16 FEET;

THENCE N63°16'03"E A DISTANCE OF 132.37 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE N57°44'41"E A DISTANCE OF 81.46 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE N20°58'44"E A DISTANCE OF 55.73 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE N17°39'58"W A DISTANCE OF 60.32 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHWEST CORNER OF SAID SECTION 29, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS N89°48'33"W, A DISTANCE OF 189.82 FEET,

SAID STRIP OF LAND BEING 329.88 FEET OR 19.99 RODS IN LENGTH, CONTAINING 0.227 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 NW/4 329.88 L.F. 19.99 RODS 0.227 ACRES

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 20TH DAY OF AUGUST 2011

[Signature of Filmon F. Jaramillo]
FILMON F. JARAMILLO, PLS 12797
901 South Canal
Carlsbad, NM 88502

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88502
Phone (505) 746-9762

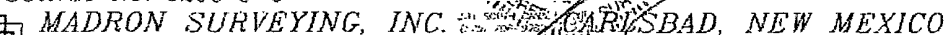
GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING IS NMSP EAST MODIFIED TO SURFACE COORDINATES.

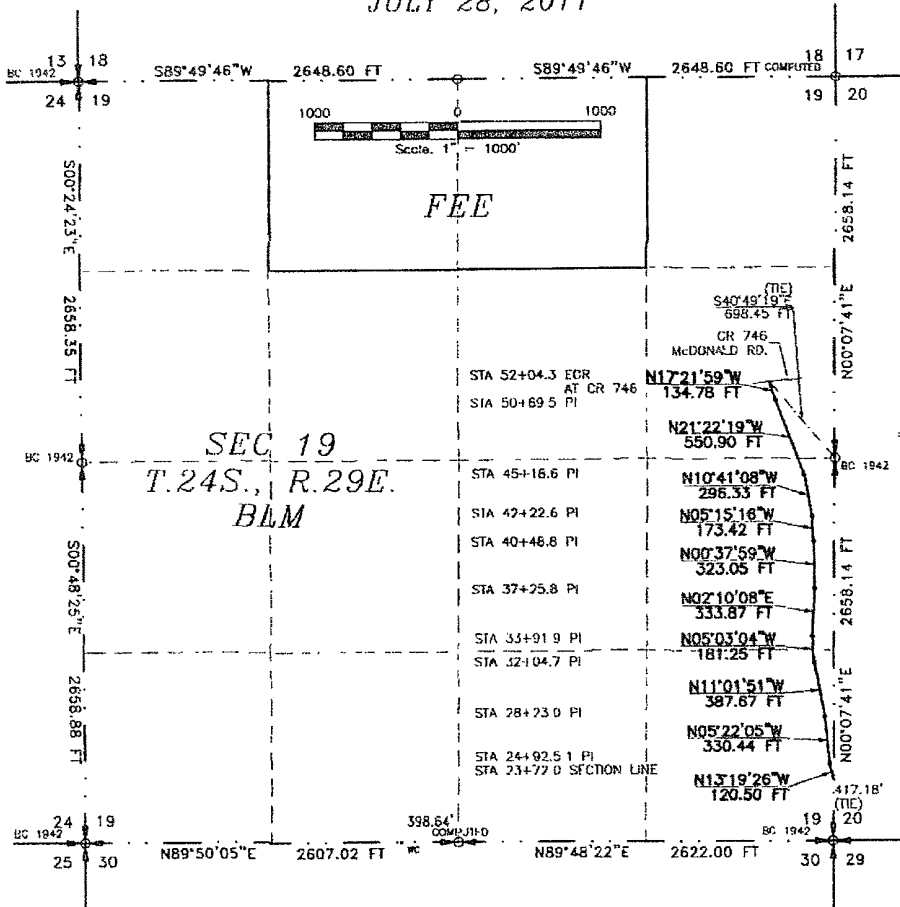
SURVEY NO. 520C 2-6

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO



Madron Surveying, Inc.
401 SOUTH CANAL
CARLSBAD NEW MEXICO 88220
Phone (575) 738-9752

MURCHISON OIL & GAS, INC.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 19, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
ACCESS TO ROCK RIDGE FEDERAL #3H
JULY 28, 2011



DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 19, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WITHIN THE SE 1/4 SE 1/4 OF SAID SECTION 19, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 19, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S00°07'41"W, A DISTANCE OF 417.18 FEET, THENCE N15°19'26"W A DISTANCE OF 120.50 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N05°22'05"W A DISTANCE OF 330.44 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N11°01'51"W A DISTANCE OF 387.67 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N05°03'04"W A DISTANCE OF 181.25 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N02°10'08"E A DISTANCE OF 333.87 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N03°37'59"W A DISTANCE OF 323.05 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N05°15'16"W A DISTANCE OF 173.42 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N10°41'08"W A DISTANCE OF 298.33 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N21°22'19"W A DISTANCE OF 550.90 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N17°21'59"W A DISTANCE OF 134.78 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE EAST QUARTER CORNER OF SAID SECTION 19, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S40°49'19"E, A DISTANCE OF 698.45 FEET;

SAID STRIP OF LAND BEING 2832.23 FEET OR 171.65 RODS IN LENGTH, CONTAINING 1.951 ACRES MORE OR LESS AND BEING ALLOCATED BY PORTIES AS FOLLOWS.

SE 1/4 SE 1/4	923.62 L.F.	55.98 RODS	0.636 ACRES
NE 1/4 SE 1/4	1343.16 L.F.	81.40 RODS	0.925 ACRES
SE 1/4 NE 1/4	565.46 L.F.	34.27 RODS	0.389 ACRES

SURVEYOR CERTIFICATE

I, FRIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797 HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEFS AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 28th DAY OF AUGUST 2011

FRIMON F. JARAMILLO, PLS. #12797
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88520
 (505) 766-9717

MADRON SURVEYING, INC.
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88520
 Phone (505) 766-9717

GENERAL NOTES

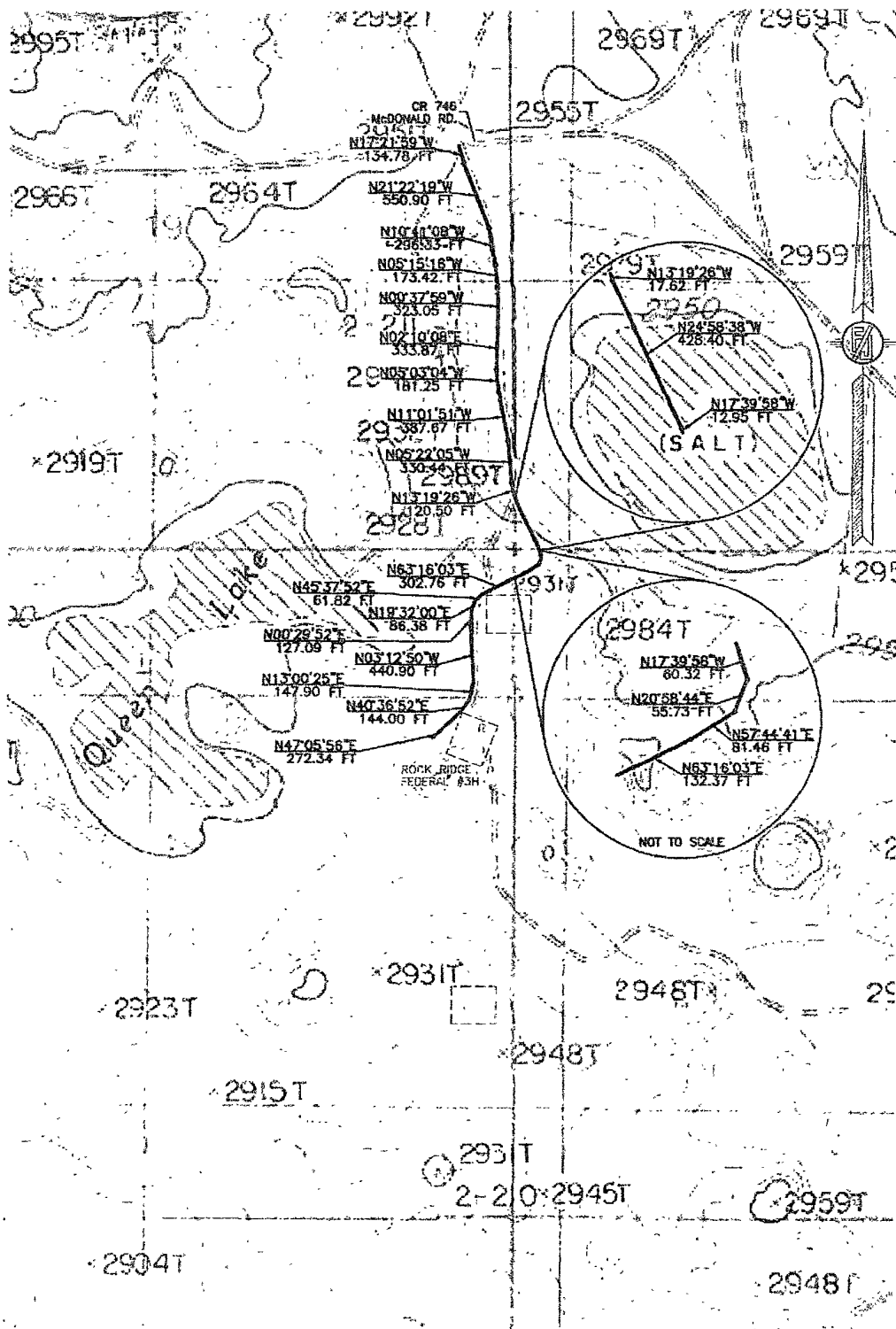
1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING IS NMSP LAST MODIFIED TO SURFACE COORDINATES

SURVEY NO. 520C 4-6

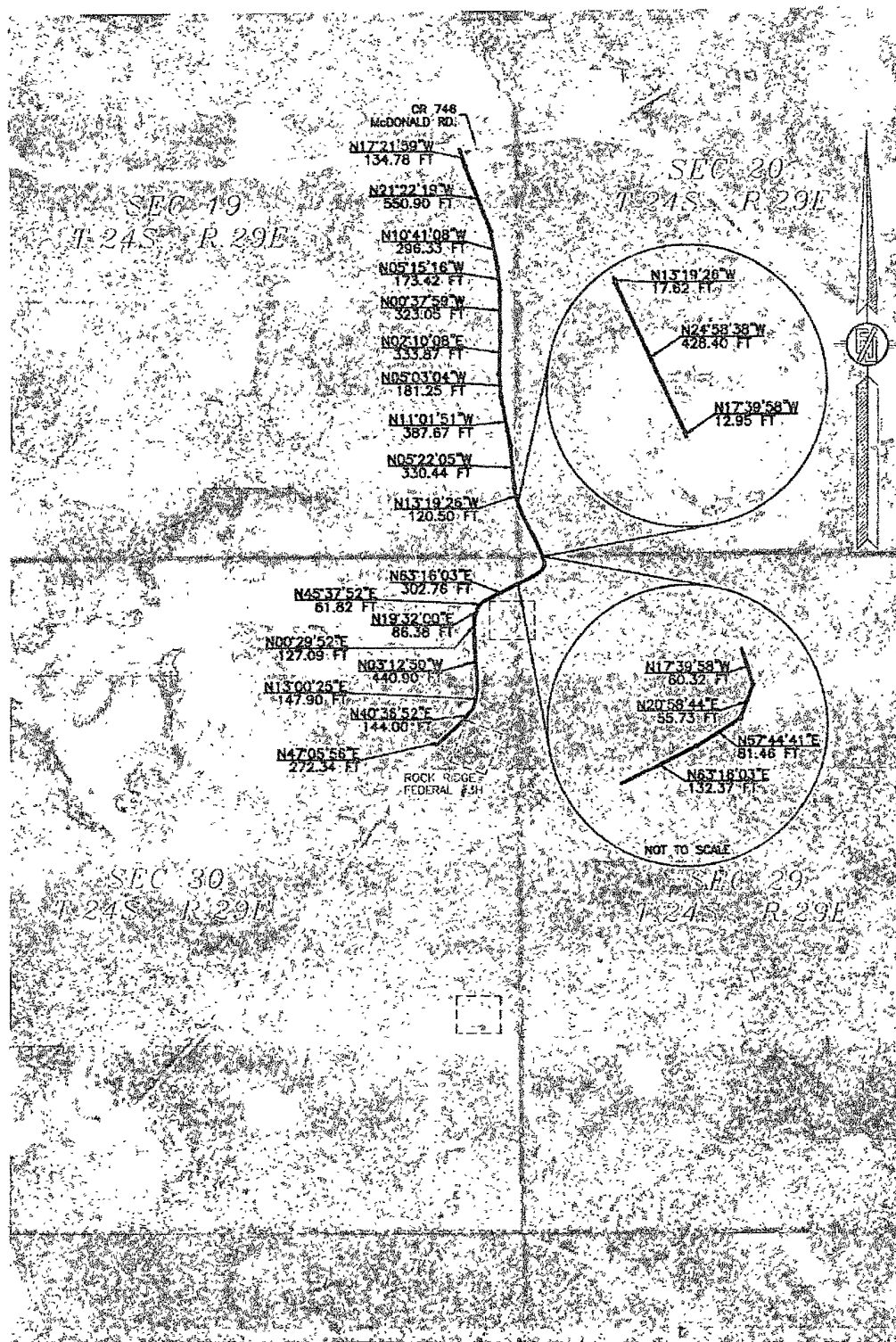
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

MURCHISON OIL & GAS, INC.
 CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
 SECTIONS 30, 29, 20 & 19 TOWNSHIP 24 SOUTH,
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 ACCESS TO ROCK RIDGE FEDERAL #3H
 JULY 28, 2011



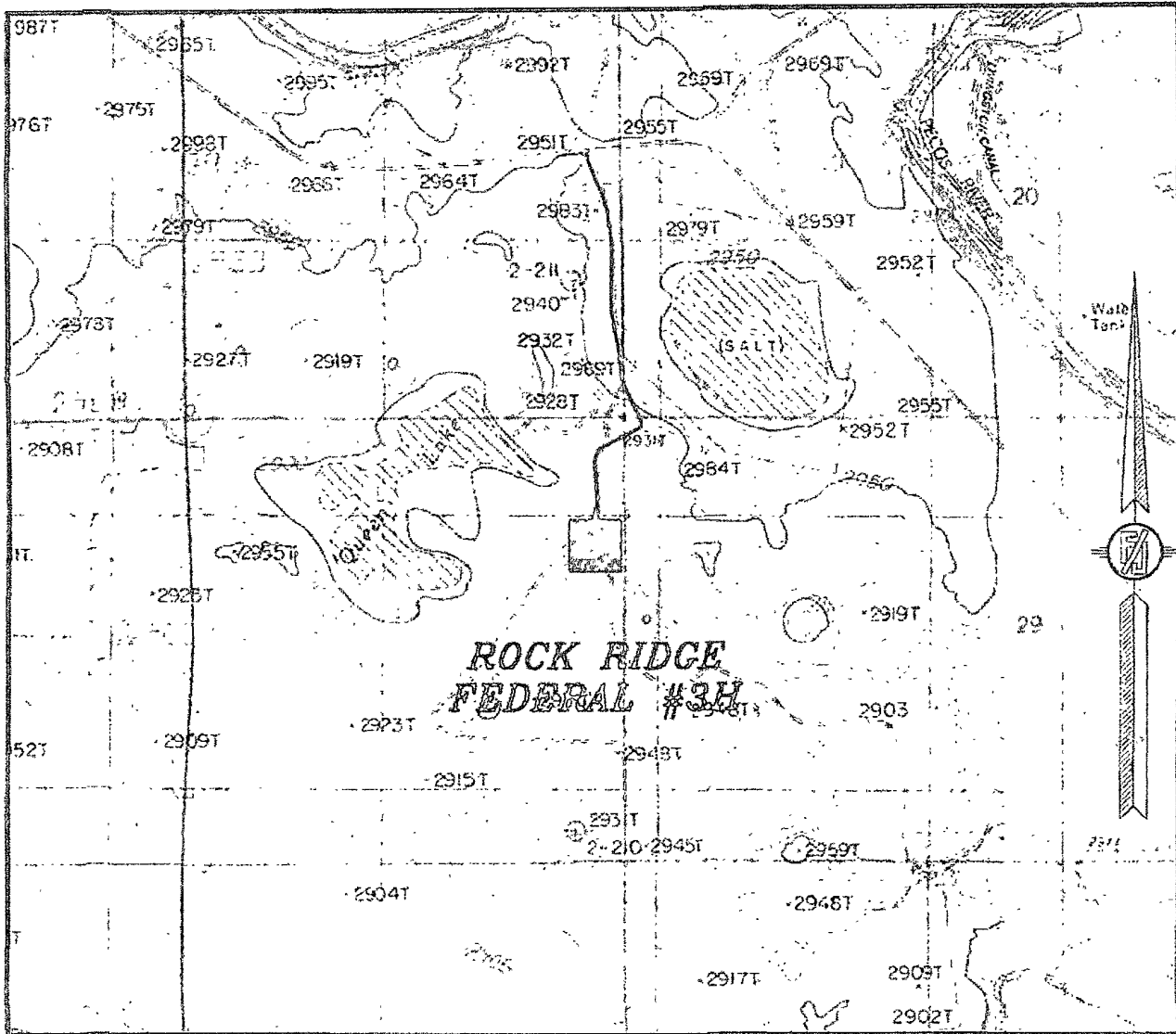
SURVEY NO. 520C 5-6

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO



MADRON SURVEYING, INC. 301 SOUTH GARDEN CARLSBAD, NEW MEXICO
(575) 235-5762

SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



CONTOUR INTERVAL:
MALAGA

NOT TO SCALE

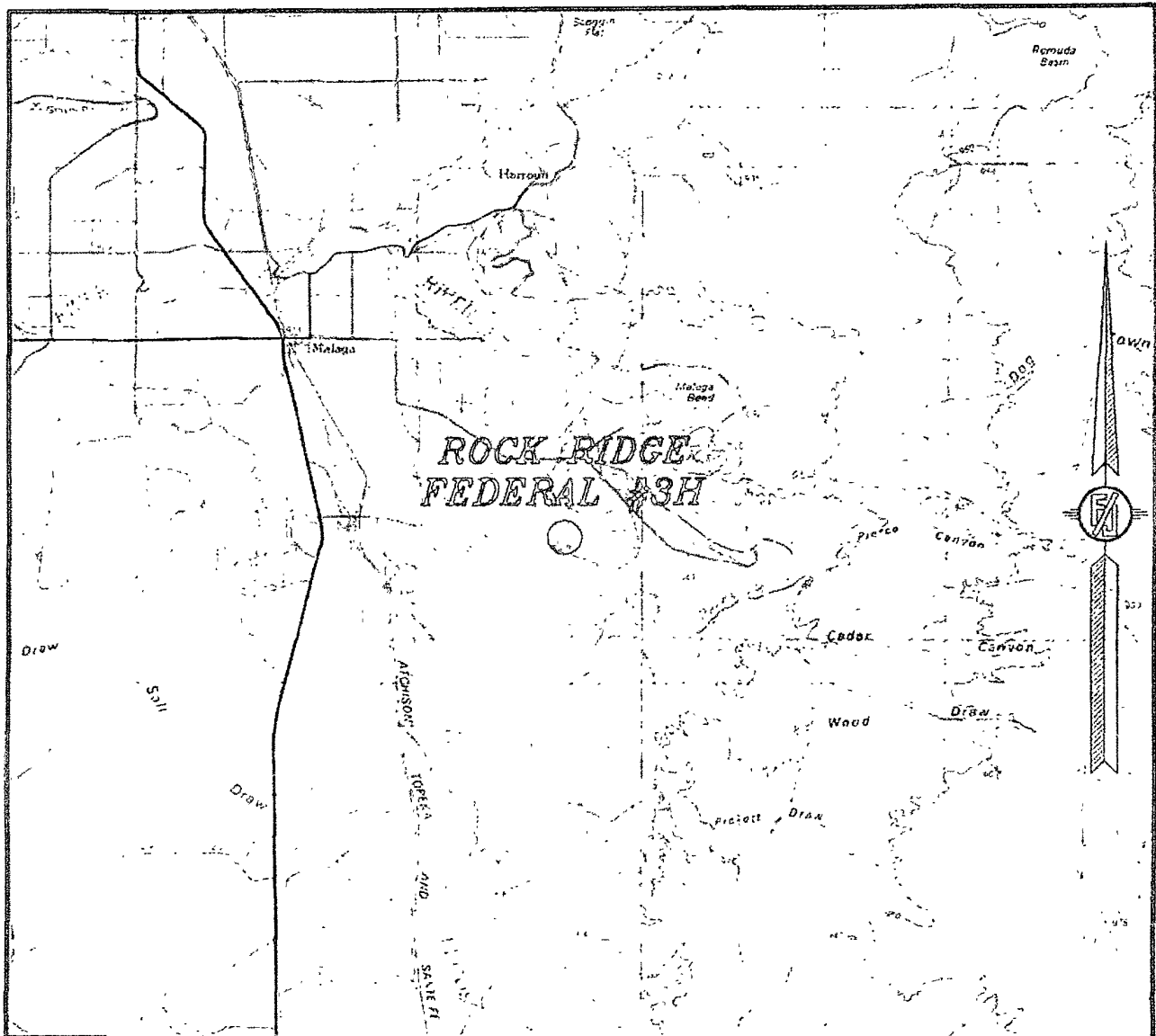
MURCHISON OIL & GAS, INC.
 ROCK RIDGE FEDERAL #3H
 LOCATED 1520 FT. FROM THE NORTH LINE
 AND 350 FT. FROM THE EAST LINE OF
 SECTION 30, TOWNSHIP 24 SOUTH,
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 13, 2011

SURVEY NO. 520B

MADRON SURVEYING, INC. 361 SOUTH CARL
(505) 765-9617 CARLSBAD, NEW MEXICO

SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



NOT TO SCALE

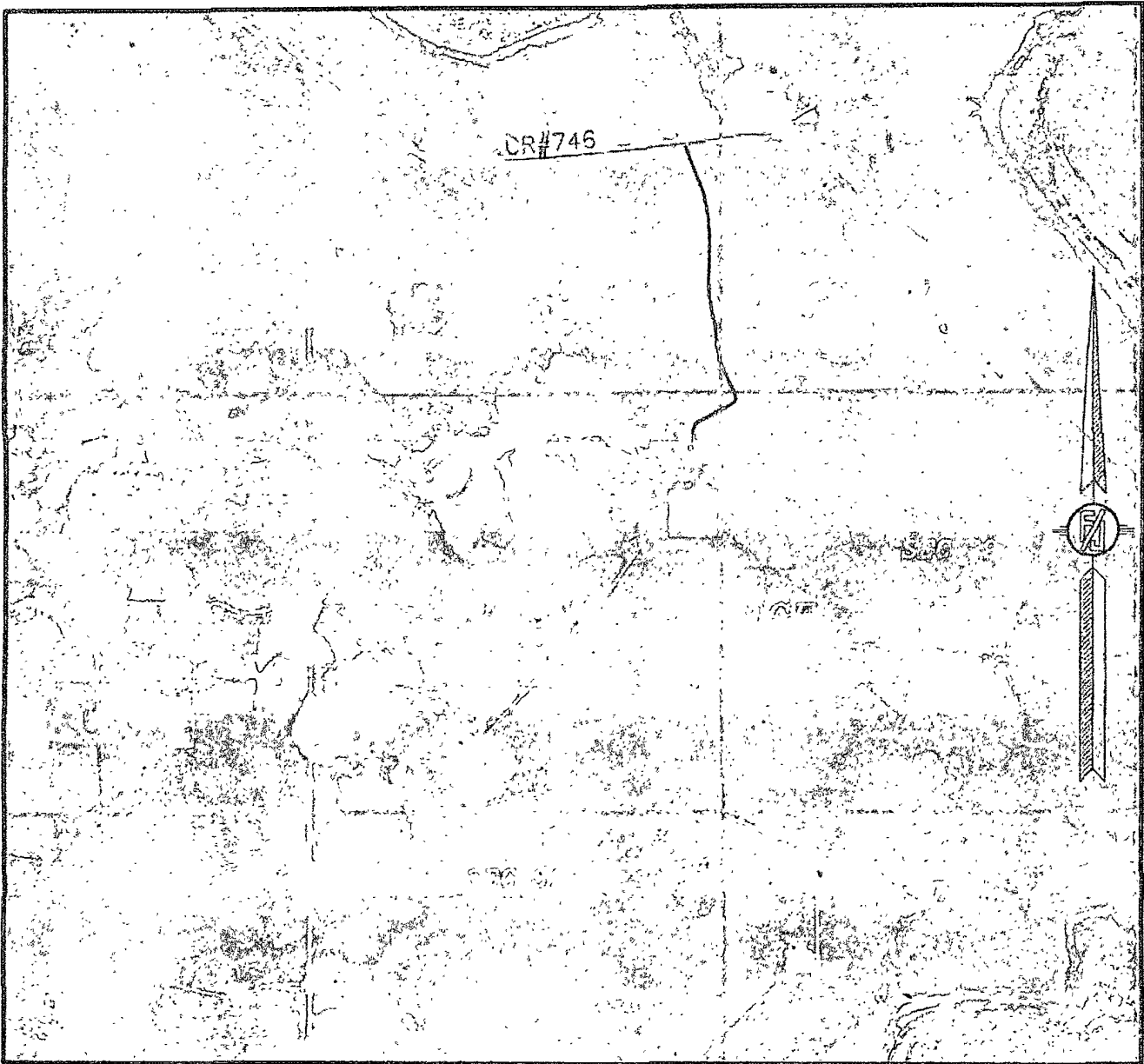
MURCHISON OIL & GAS, INC.
ROCK RIDGE FEDERAL #3H
LOCATED 1520 FT. FROM THE NORTH LINE
AND 350 FT. FROM THE EAST LINE OF
SECTION 30, TOWNSHIP 24 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 13, 2011

SURVEY NO. 520B

MADRON SURVEYING, INC. 301 SOUTH U.S. 180 CARLSBAD, NEW MEXICO
(775) 706-5672

SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
USDA - AUG, 2009

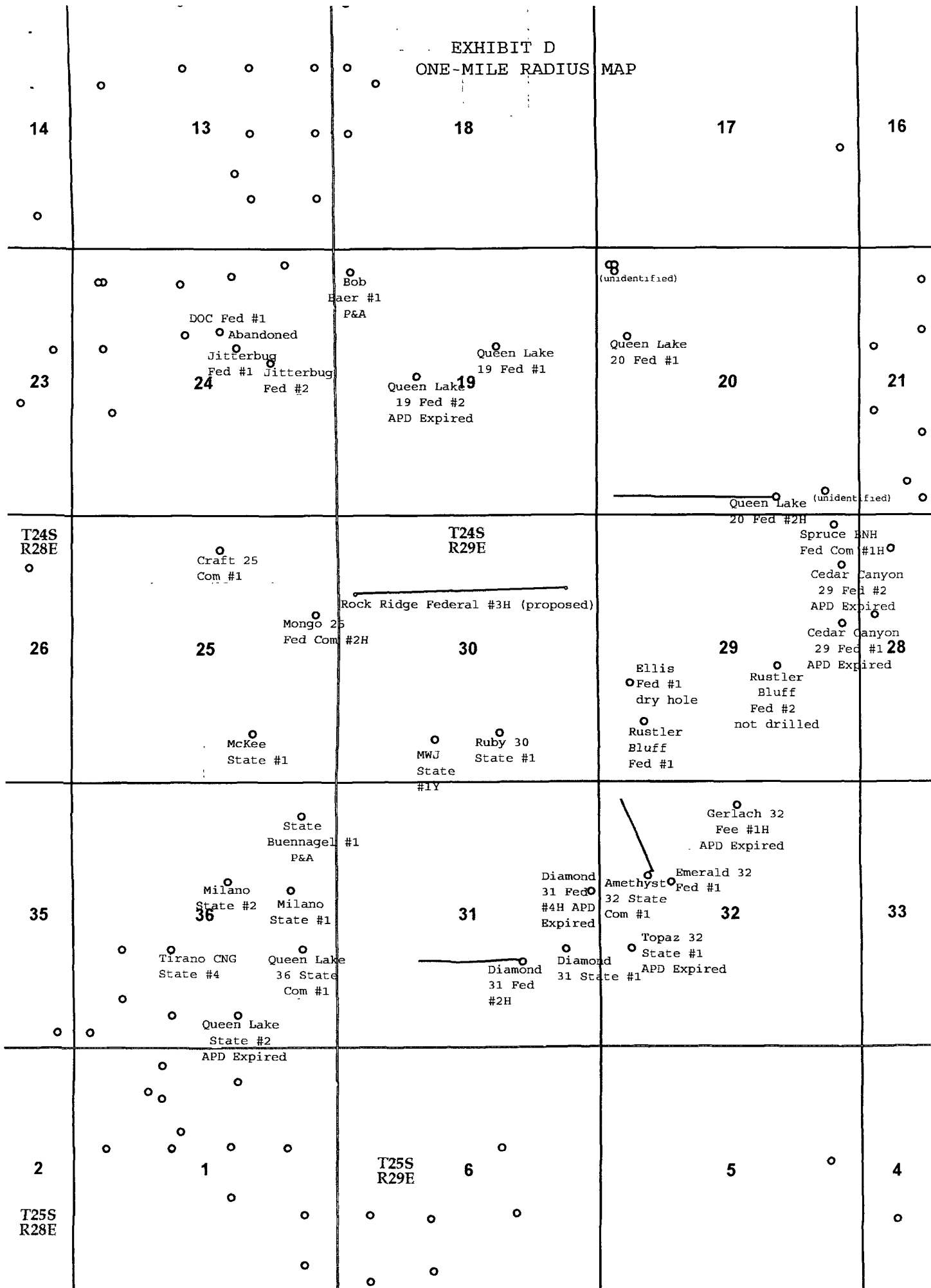
MURCHISON OIL & GAS, INC.
ROCK RIDGE FEDERAL #3H
LOCATED 1520 FT. FROM THE NORTH LINE
AND 350 FT. FROM THE EAST LINE OF
SECTION 30, TOWNSHIP 24 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 13, 2011

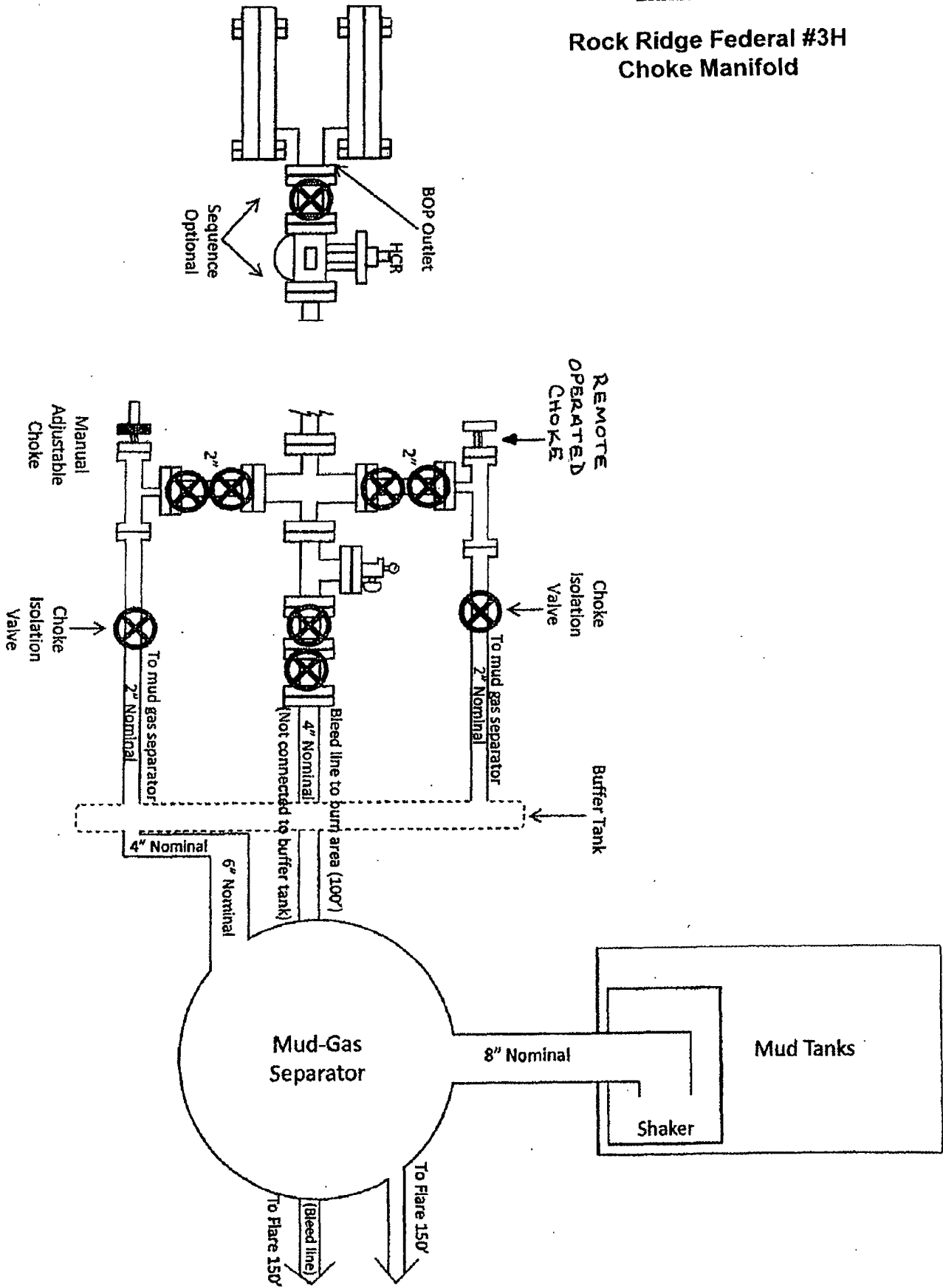
SURVEY NO. 520B

MADRON SURVEYING, INC. 30 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 769-1872

EXHIBIT D
ONE-MILE RADIUS MAP



Rock Ridge Federal #3H Choke Manifold



CHOKE MANIFOLD

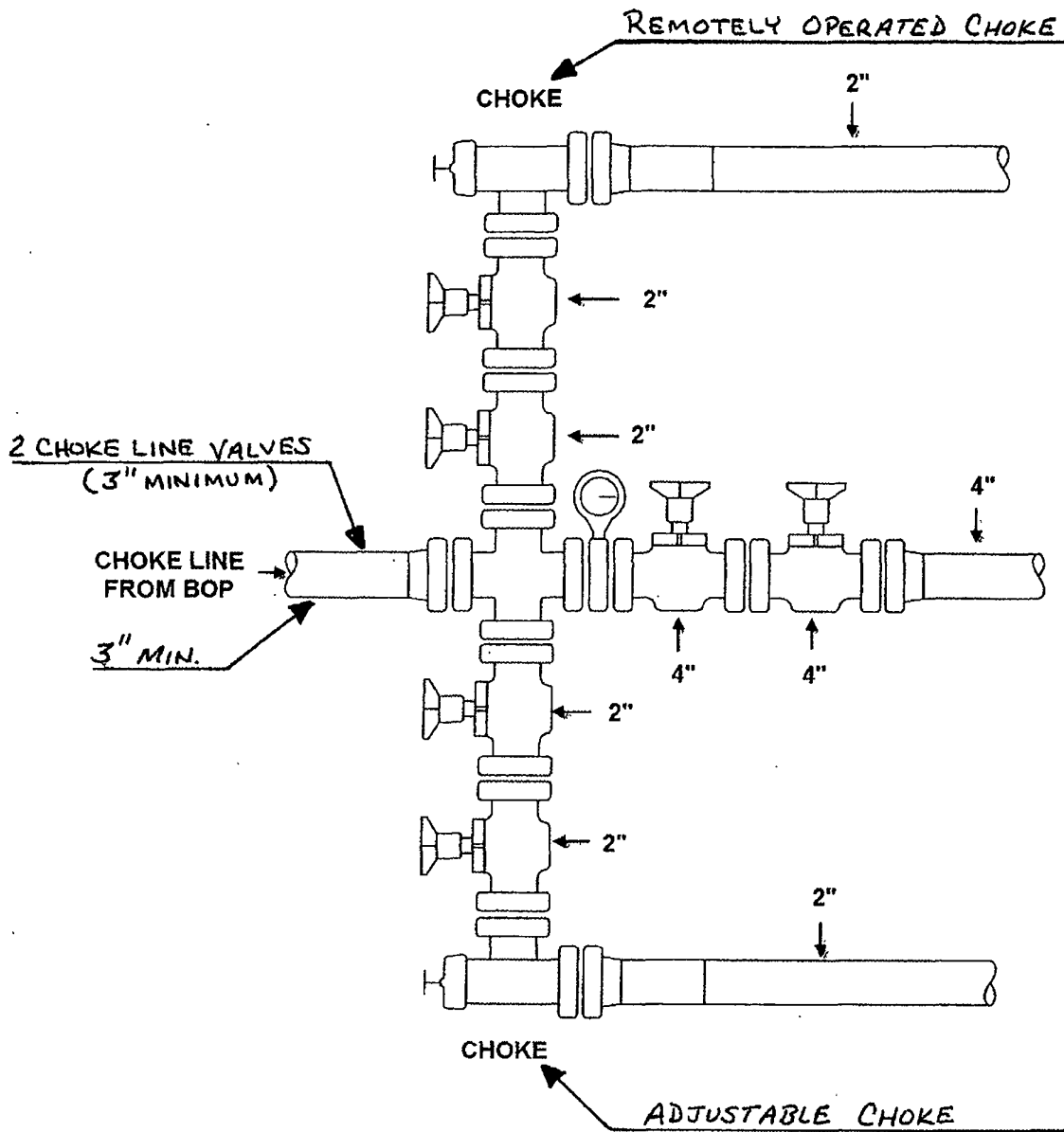
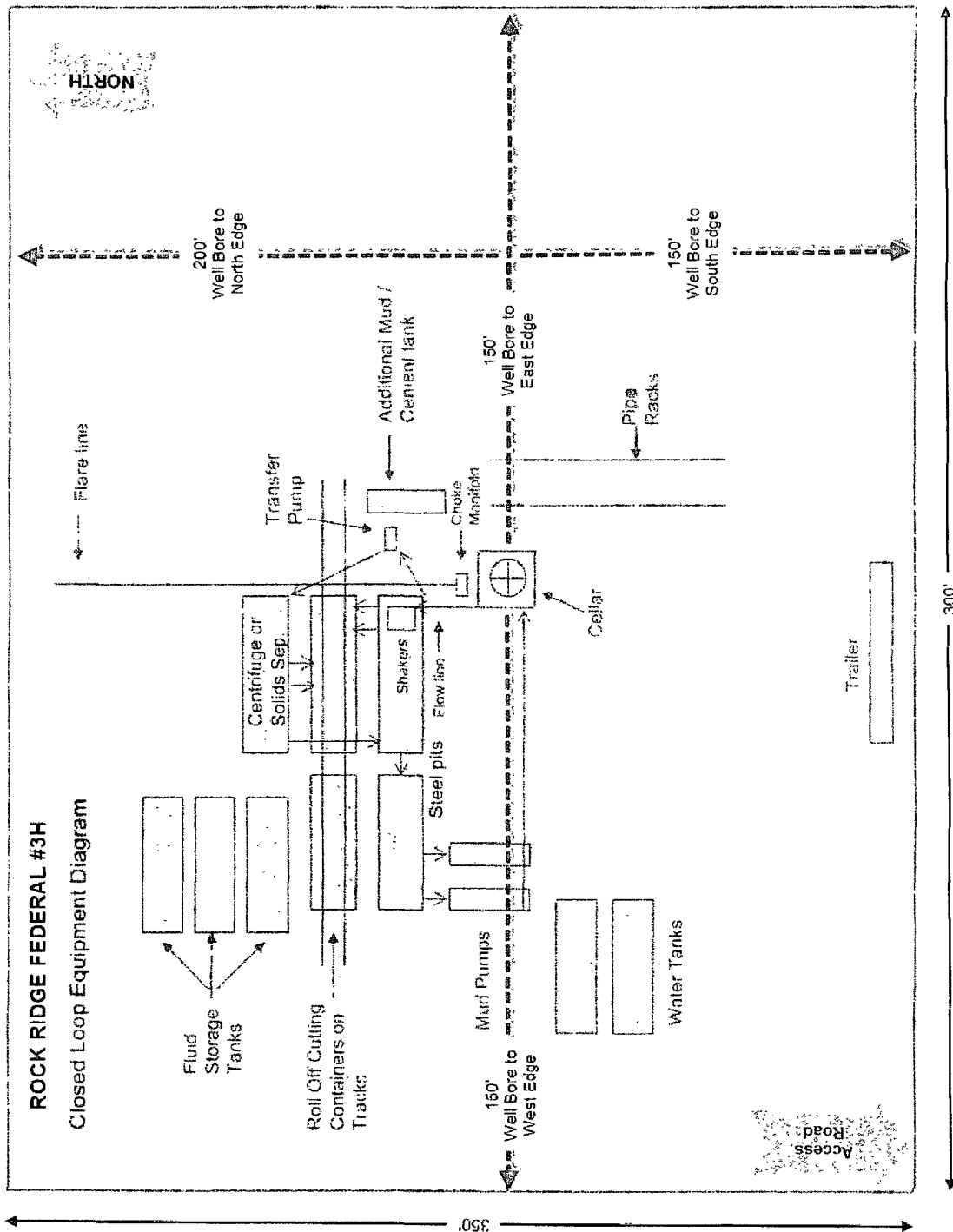


EXHIBIT H. CLOSED LOOP SYSTEM



LOCATION MAP

Report 1
1625 N. French (1/4, 10/24/81) NM 87501
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1016 E. 10th Street, Alamogordo, NM 85410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

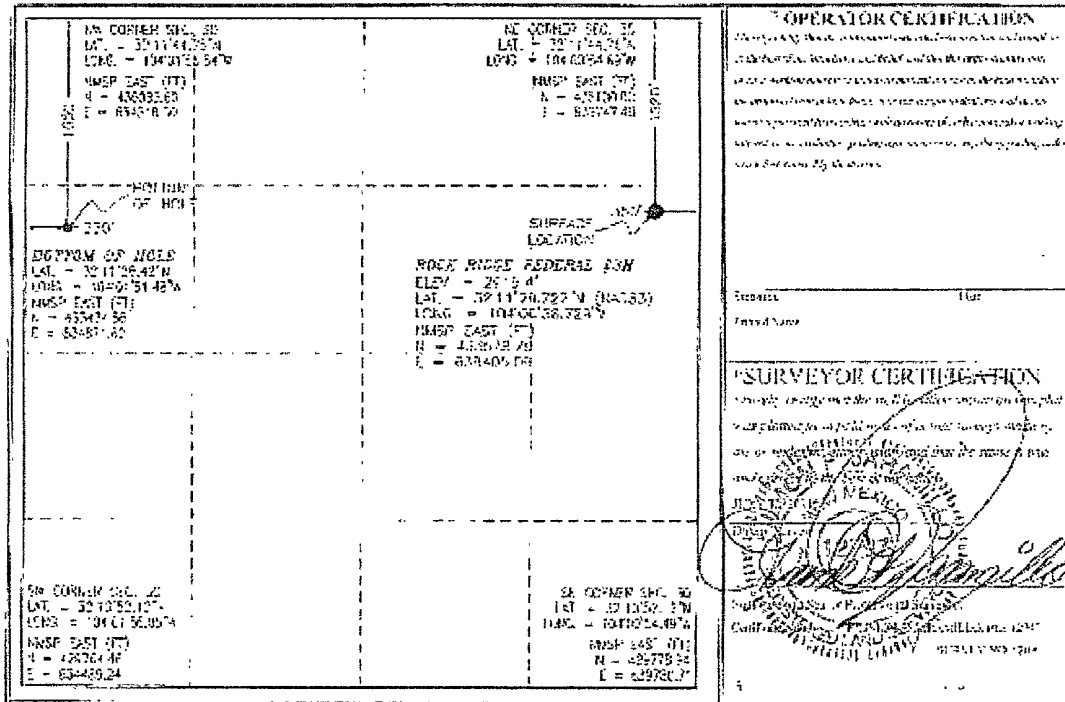
Form C-102
Revised October 11, 2000
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Prod Code		Prod Name	
Property Code		Project Name ROCK RIDGE FEDERAL			
UGRP No.		Operator Name MURCHISON OIL & GAS, INC.			
		Well Number 3H			
		Elevation 2915.4			
Surface Location					
U.T. or Twp.	Section	Township	Range	Footage	North-South line
H	30	24 S	29 E	1520	NORTH
Bottom Hole Location if Different from Surface					
U.T. or Twp.	Section	Township	Range	Footage	North-South line
L	30	24 S	29 E	1650	NORTH
East-West line					
WEST					
County					
EDDY					
Recorded Area		Acres or m2		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



VICINITY MAP

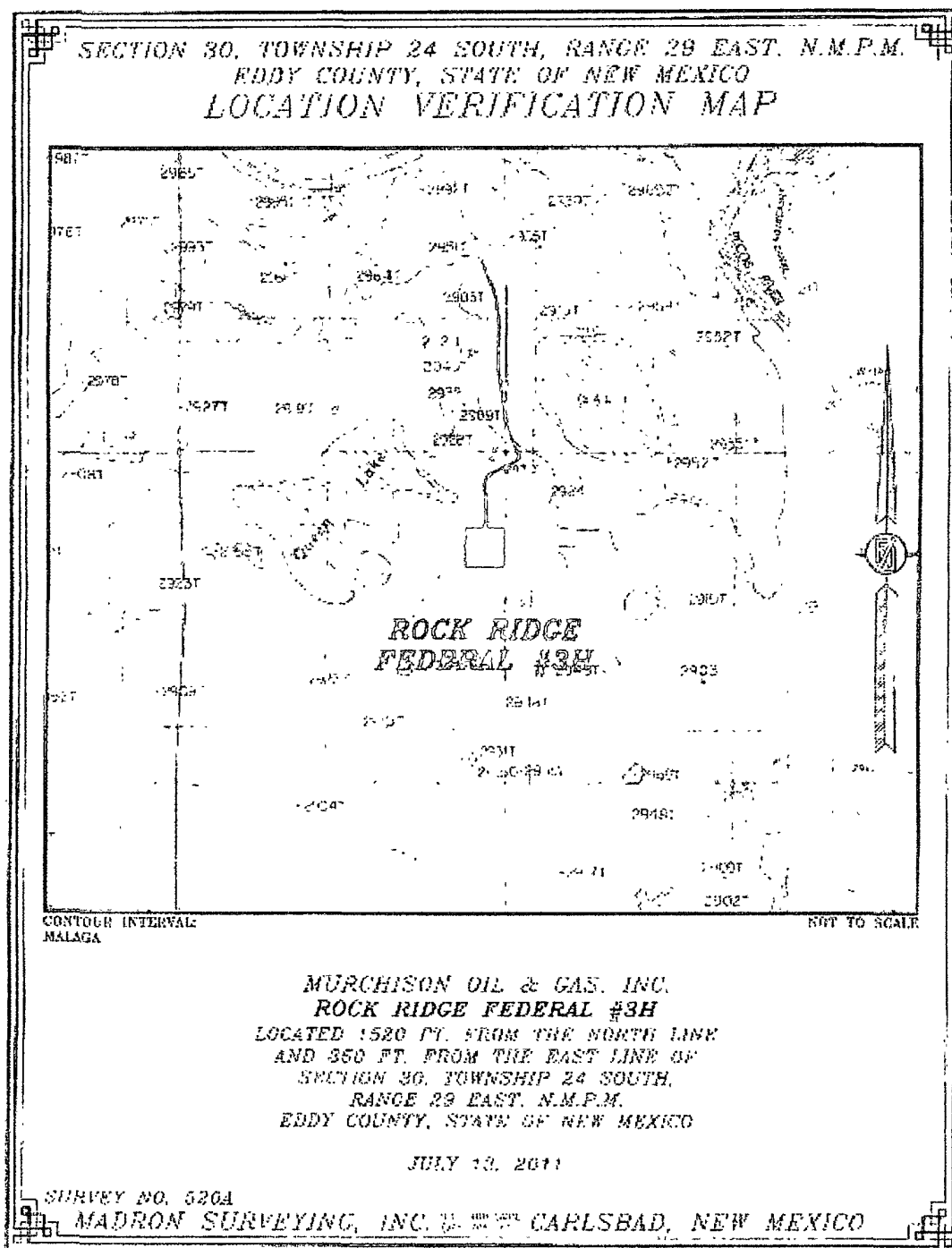


EXHIBIT E

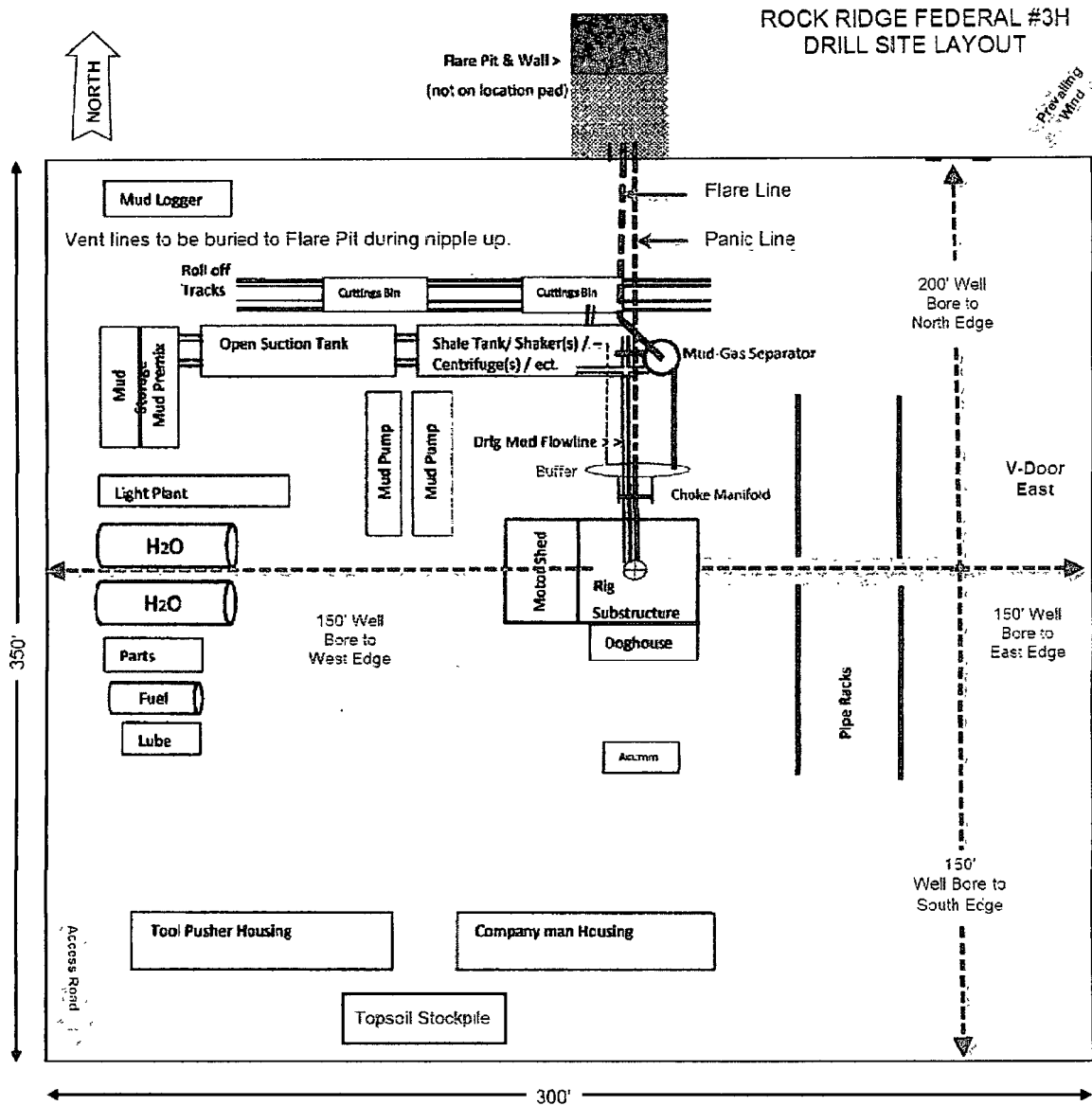
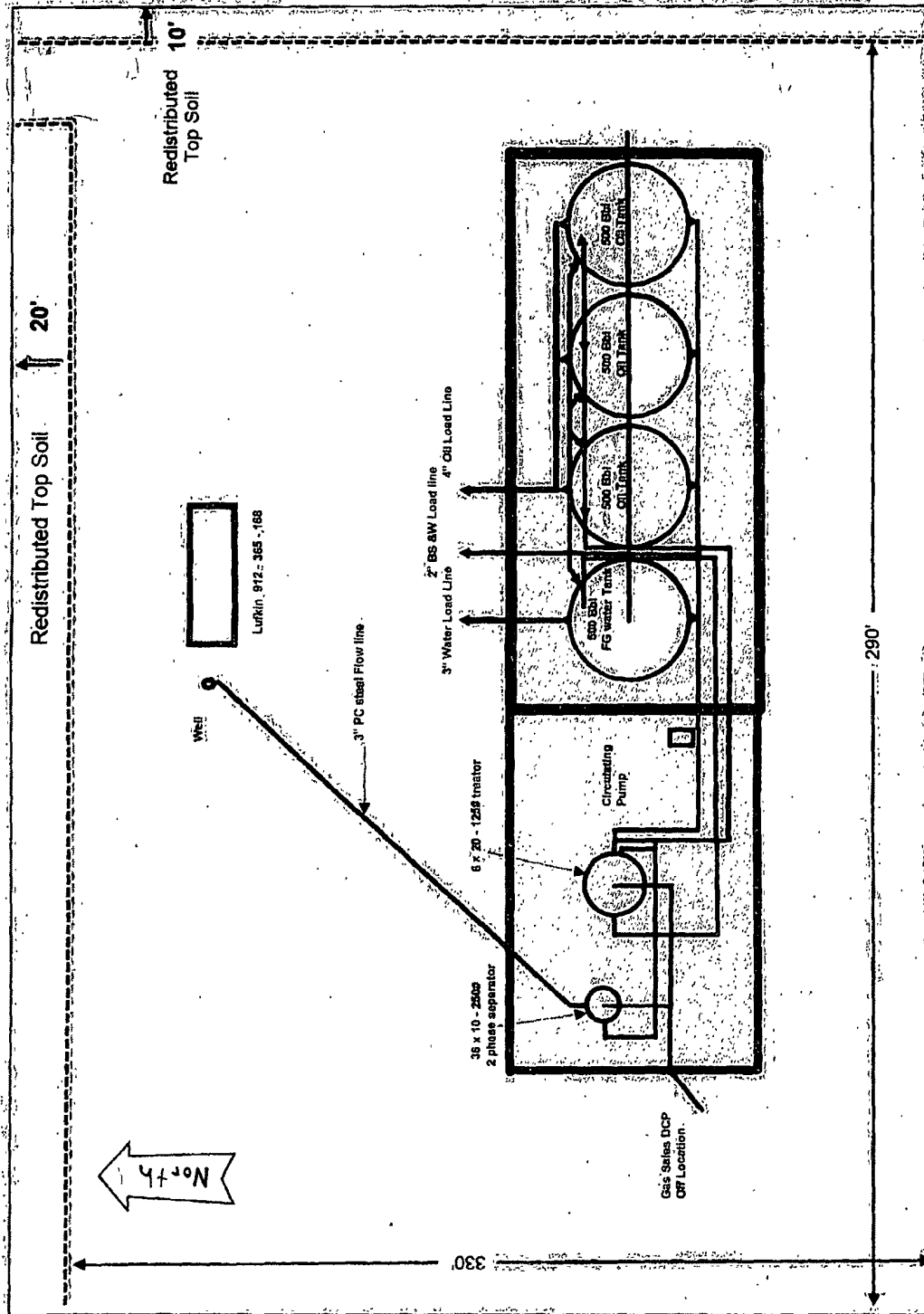


EXHIBIT F PRODUCTION FACILITIES INTERIM RECLAMATION

ROCK RIDGE FEDERAL #3H PRODUCTION FACILITY LAYOUT



Containment Area: Fiberglass container around tanks (Vol. = 40' x 100' x 2.89' = 2,064 bbls)

Tank Pad: Tanks set within fiberglass containment

Leak Detection: Leak detection float w/alarm inside fiberglass container; level control alarms on all tanks