Form 3160-3
(August 1999)

OPER. OGRID NO. 20165
PROPERTY NO. 34049
POOL CODE 86040
EFF. DATE 8-2-04
APPLICA API NO. 30-025-36797

District I

POTASH

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.
NM-05148

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Gunslinger 11 Fed. Com., #1

2. Name of Operator
Samson Resources

9. API Well No.
30-025-36797

3a. Address
Samson Plaza–Two W. 2nd St. Tulsa, OK 74103

3b. Phone No. *(include area code)*
(918) 591-1822

10. Field and Pool, or Exploratory
Teas Penn Gas

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*
At surface 810' FSL & 660' FWL
At proposed prod. zone same

R-111-P Potash

11. Sec., T., R., M., or Blk. and Survey or Area
Sec. 11-T20S-R33E

14. Distance in miles and direction from nearest town or post office*
37 miles northeast of Carlsbad, NM

12. County or Parish
Lea

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 510'

16. No. of Acres in lease
40

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 150'

19. Proposed Depth
13,800'

20. BLM/BIA Bond No. on file
NM-2037

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3576' GL

22. Approximate date work will start*
June 15, 2004

23. Estimated duration
6 weeks

RECEIVED
OCD
HOBBS

Capitan Controlled Water Basin

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature: George R. Smith
Name *(Printed/Typed)*: George R. Smith
Date: 1/16/04

Title: Agent for Samson Resources

Approved by *(Signature)*: /s/ Linda S. C. Rundell
Name *(Printed/Typed)*: /s/ Linda S. C. Rundell
Date: JUN 04 2004

Title: STATE DIRECTOR
Office: NM STATE OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Lease Responsibility Statement: Samson Resources Co. accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof.

George R. Smith, agent

R-111-P Potash
CEMENT BEHIND THE 11 3/4"
CASING MUST BE CIRCULATED

DECLARED WATER BASIN
CEMENT BEHIND THE 16"
CASING MUST BE CIRCULATED

DECLARED WATER BASIN
CEMENT BEHIND THE 8 5/8"
CASING MUST BE TIED BACK

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
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
30-025-36797	86040	Teas Penn Gas

Property Code	Property Name	Well Number
34049	GUNSLINGER "11" FEDERAL COM.	1

OGRID No.	Operator Name	Elevation
20165	SAMSON RESOURCES	3576'

Surface Location

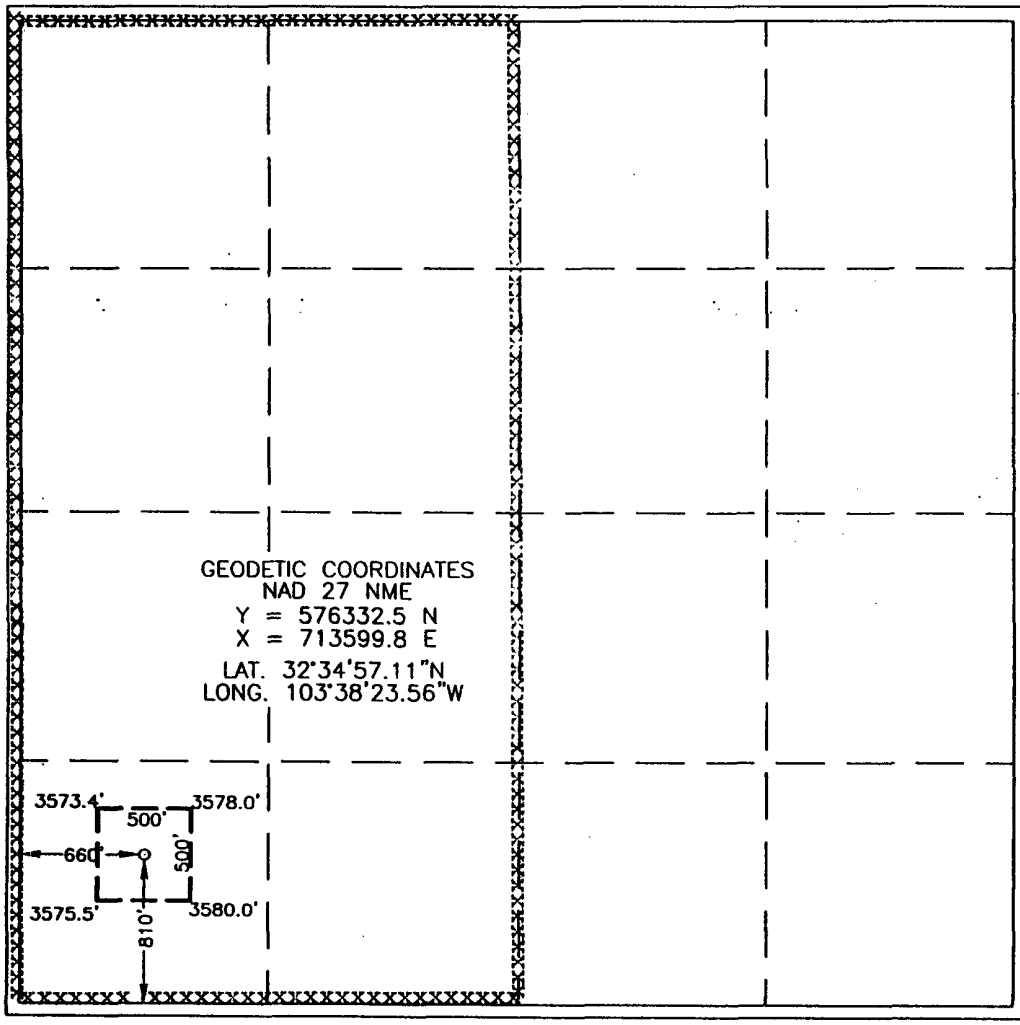
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	11	20-S	33-E		810	SOUTH	660	WEST	LEA

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.
320		Com.	

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

George R. Smith
Signature

George R. Smith, agent
Printed Name

for: Samson Resources
Title

February 19, 2004
Date

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my belief.

FEBRUARY 4, 2004
Date Surveyed L.A.

Signature & Seal of Professional Surveyor

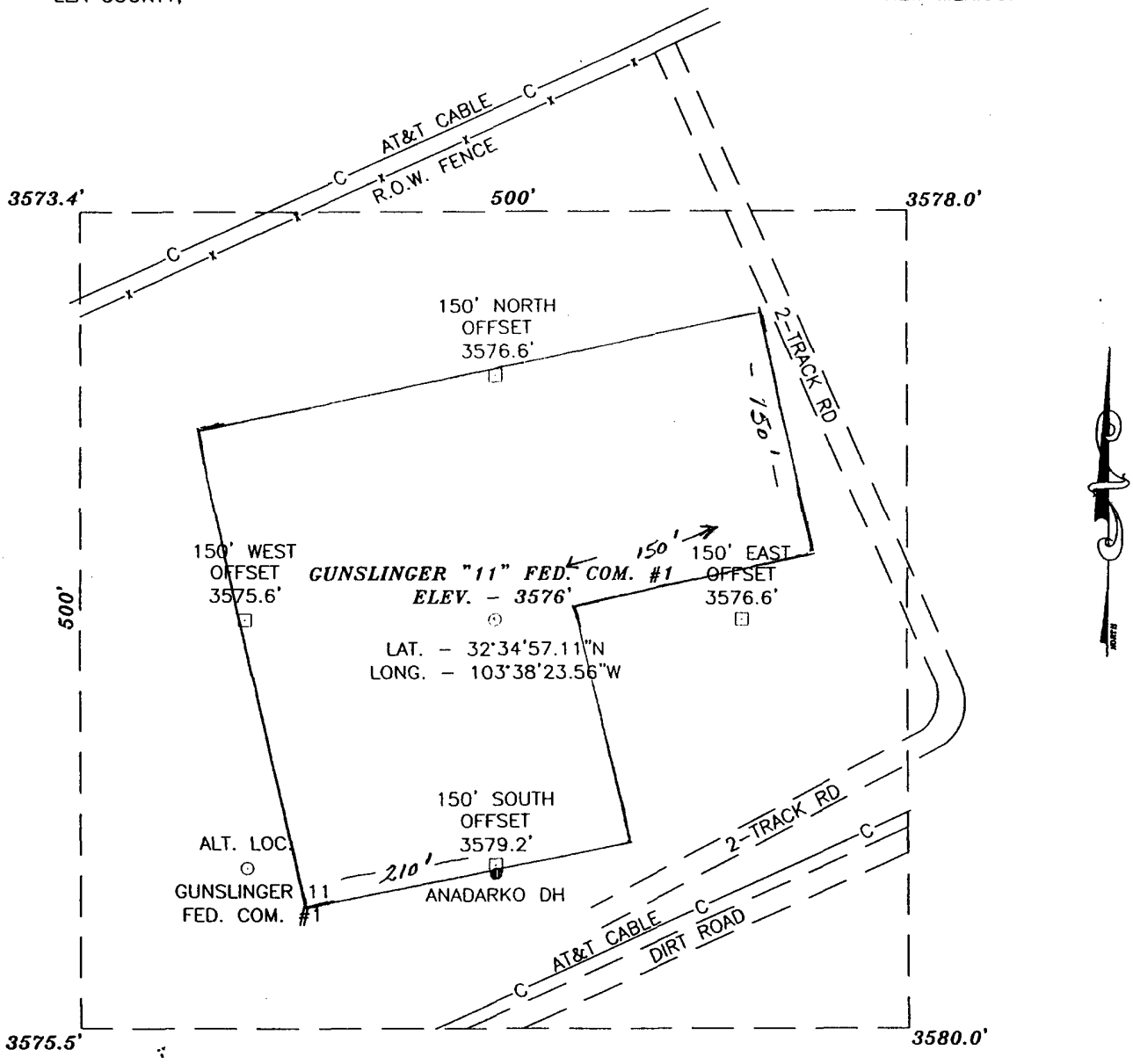
Gary L. Eidson 2/9/04

04.11.0130

Certificate No. GARY EIDSON 12641

SECTION 11, TOWNSHIP 20 SOUTH, RANGE 33 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO.



100 0 100 200

SCALE: 1"=100'

DIRECTIONS TO LOCATION:

TRAVELING EAST ON HWY #62-180 TURN RIGHT AT MILE MARKER 73.15. GO SOUTHWEST ON CALICHE ROAD 600'. TURN LEFT ONTO DIRT ROAD (ALONG AT&T FIBER OPTIC LN.) AND GO 0.28 MILES NORTHEAST. PROPOSED LOCATION IS 200' NORTH.

JOHN WEST SURVEYING COMPANY
412 N. DAL PASO - HOBBS, NEW MEXICO - 505-393-3117

SAMSON RESOURCES

THE GUNSLINGER "11" FED. COM. #1 LOCATED 810 FROM THE SOUTH LINE AND 660 FROM THE WEST LINE SECTION 11, TOWNSHIP 20 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 2/04/04		Sheet 1 of 1 Sheets	
W.O. Number: 04.11.0130		Drawn By: L.A.	
Date: 2/06/04	DISK:CD#3	04110130	

APPLICATION FOR DRILLING

SAMSON RESOURCES CO.
Gunslinger 11 Federal Com., Well No. 1
810' FSL & 660' FWL, Sec. 11-T20S-R33E
Lea County, New Mexico
Lease No.: NM-13280
Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Samson Resources Co. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

Rustler	1,420'	Penn Shale	12,150'
Tansill	3,100'	Strawn	12,300'
Capitan	3,400'	Atoka	12,500'
Delaware	5,200'	Morrow	13,200'
1st Bone Spring	9,400'	T.D.	13,800'
Wolfcamp	11,600'		

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:
   Water: Surface water between 100' - 300'.
   Oil: Possible in the Delaware below 5200'.
   Gas: Possible in Atoka below 12,500' and the Morrow below 13, 200'.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
18 1/2"	16"	75.0#	K-55	BT&C	0' - 1,450'	Circ 890 sx "C" cement
14 3/4"	11 3/4"	54.0#	K-55	LT&C	0' - 3,100'	Circ. 1330 sx. HLC Prem Plus
10 5/8"	8 5/8"	36.0 32.0#	HC K55	LT&C	0' - 5,200'	Circ. 900 sx. Interfill C & Prem
7 7/8"	5 1/2"	20.0#	P110	LT&C	0' - 13,800'	1050 sx Zoneseal & 250 sx Super H TOC 5000'

5. Minimum Specifications for Pressure Control Equipment:
NU 21 ¾" 2M WP Hydril & test to 800 psi before drilling 14 ¾" hole.
NU 13 5/8" 10M WP Shaffer, double over single w/ 13 5/8" Hydril annular preventer before drilling the 10 5/8" & 7 7/8" holes. Perform 3M test before drilling 10 5/8" hole & 5M test before drill 7 7/8" hole. See Exhibit "E".

6. MUD PROGRAM:		MUD WEIGHT	VIS.	W/L CONTROL
0' - 1,450':	Fresh water mud:	8.4 - 9.2 ppg	28 - 29	No W/L control
1,450' - 3,100':	Fresh/native brine	10.0 - 10.4 ppg	26 - 29	No W/L control
3,100' - 5,200':	Fresh water + addit.	8.8 - 9.6 ppg	26 - 29	No W/L control
5,200' - 12,300':	Fresh water/Cut brine	8.4 - 9.2 ppg	26 - 29	No W/L control
12,300' - 13,800':	Cut Brine/xcd Polymer	9.4 - 11.5 ppg	29 - 42	W/L control: <10cc

7. **Auxiliary Equipment**: Blowout Preventer, flow sensors and stabbing valve.

8. Testing, Logging, and Coring Program:
Drill Stem Tests: None unless conditions warrant.
Logging: 5,000' to T.D: CNL-DNL w/GR-Cal.
5,000' to Surface: CNL-GR
Coring: Rotary sidewall if dictated by logs.

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 6072 psi and surface pressure of 3036 psi with a temperature of 198°.

10. H_2S: None expected. None expected. The Mud Log Unit will be cautioned to use a gas trap to detect H_2S and if any is detected the mud weight will be increased along with H_2S inhibitors sufficient to control the gas.

11. Anticipated starting date: April 15, 2004.
Anticipated completion of drilling operations: Approximately 6 weeks.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

SAMSON RESOURCES
Gunslinger 11 Federal Com., Well No. 1
810' FSL & 660' FWL, Sec. 11-T20S-R33E
Lea County, New Mexico
Lease No.: NM-13280
(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

1. EXISTING ROADS:

A. Exhibit "A" is a portion of a USGS/BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 37 road miles northeast of Carlsbad, New Mexico. Traveling east from Carlsbad there will be approximately 37.0 miles of paved highway and .5 mile of gravel oilfield road.

B. Directions: Travel east from Carlsbad, NM on U.S. Highway 62/180 for approximately 32 miles to NM Highway #176. Continue east on #62/180 for 5.3 miles, .1 mile east of MM #73. Turn south, at a Woodbine Pet. and a Shackleford Oil Co. sign, for .1 mile to an east/west crossroad, which is the access road for an AT&T buried fiber optic cable. Turn to the NE on the AT & T access road for .2 mile to the southwest corner of the proposed well site.

2. PLANNED ACCESS ROAD:

A. Length and Width: There will be approximately 1100 feet of existing access road 12 feet wide (24' max.). The proposed and existing access roads are color coded on Exhibit "A".

B. Construction: The existing access road will be upgraded by grading and topping with compacted caliche and will be properly drained.

C. Turnouts: There may be at least one turnout increasing the road width to 20 feet for passing.

D. Culverts: None required.

E. Cuts and Fills: None required.

F. Gates, Cattle guards: None required.

G. Off Lease R/W: None required.

3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two-mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

A. Samson Resources has no production facilities on the lease at this time.

B. If the well proves to be commercial, the necessary production facilities, gas production-process equipment and tank battery, if required, will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for the access road and well site pad will be obtained on location, if available, or from an approved Federal pit located in the SENW of Sec. 14-T20S-R33E. No surface materials will be disturbed except those necessary for actual grading and construction of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the reserve pits.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. All pits will be fenced with normal fencing materials to prevent livestock and wildlife from entering the area.

D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.

E. Oil produced during operations will be stored in tanks until sold.

F. Current laws and regulations pertaining to the disposal of human waste will be complied with.

G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

A. None required.

9. WELL SITE LAYOUT:

A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 500' X 500'.

B. Mat Size: 300' X 210', plus 150' X 150' mud pits. The pits will be on the northeast.

C. Cut & Fill: There will be a cut of 3-5 feet on the south and southwest with fill to the north and northwest.

D. The surface will be topped with compacted caliche and the mud pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible

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

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to work after completion or abandonment.

11. OTHER INFORMATION:

A. Topography: The proposed well site and access road is located in the Querecho Plains. The location has an overall northwesterly slope of 1-2% from an elevation of 3576 feet.

B. Soil: The topsoil on the well site and access road is reddish brown colored fine sand. The soil is of the Tonuco Loamy Fine Sands soils series.

C. Flora and Fauna: The vegetation at the well site is a sparse to fair grass cover of three-awn, dropseed, grama some bluestem, muhly and other miscellaneous native grasses along with plants of mesquite, yucca, sage, javelina, sparse shinnery oak brush, broomweed, cacti, buckwheat and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.

D. Ponds and Streams: None.

E. Residences and Other Structures: None, but existing oil field facilities and US Highway 62/180, 600 feet to the north. The AT&T buried fiber optic cable is 225 feet to the south.

F. Land Use: Cattle grazing.

G. Surface Ownership: The proposed well site and access road are on Federal surface.

H. There is no evidence of archaeological, historical or cultural sites in the area. Archaeological Survey Consultants, P.O. Box 2285, Roswell, NM 88202 are conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Billy Goodwin
Samson Resources
Samson Plaza-Two West Second St.
Tulsa, OK 74103-3103
Office Phone: (918) 591-1822

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 Samson Resources 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.

February 19, 2004

George R. Smith
Agent for: Samson Resources

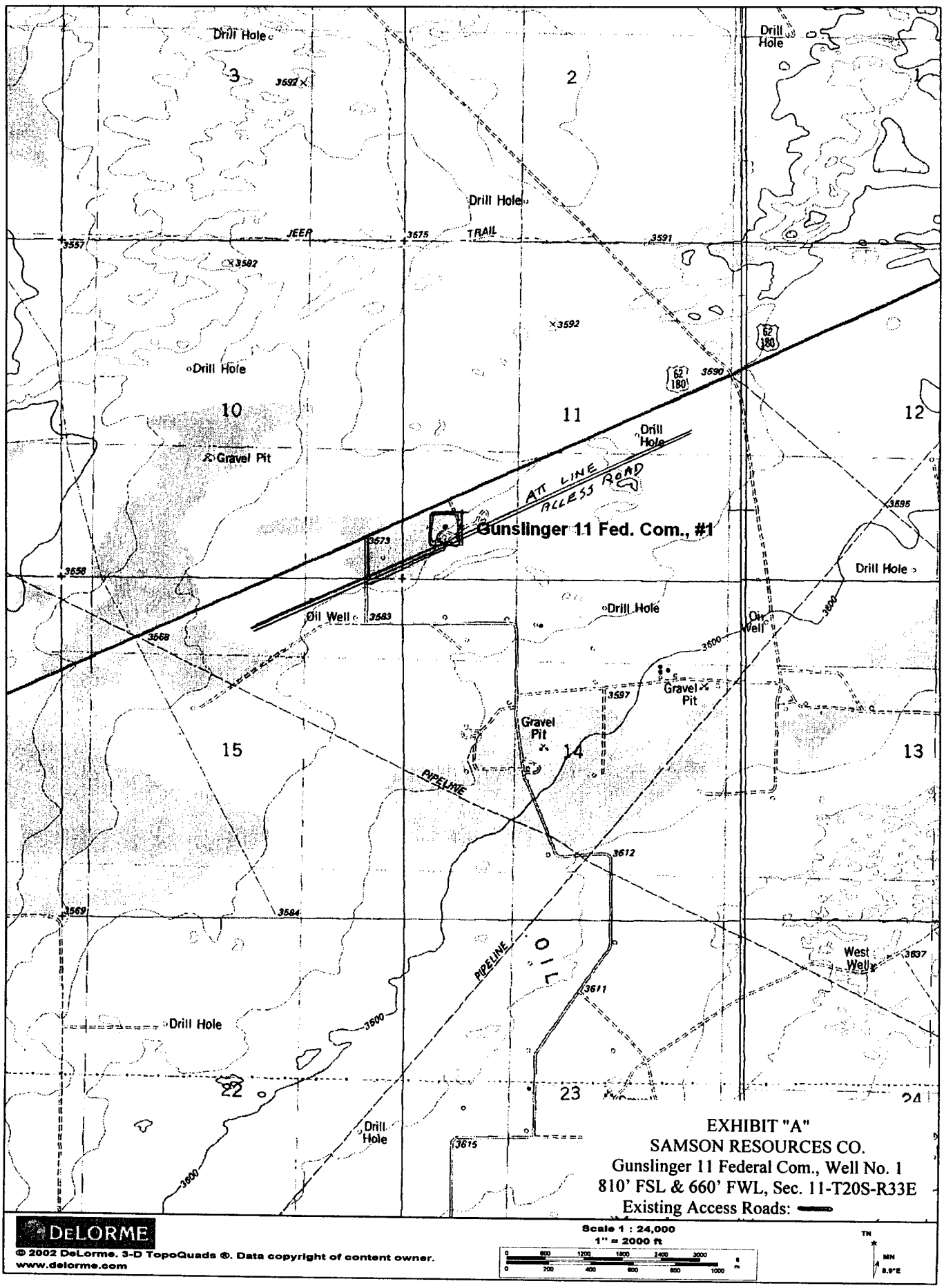


EXHIBIT "A"
SAMSON RESOURCES CO.
Gunslinger 11 Federal Com., Well No. 1
810' FSL & 660' FWL, Sec. 11-T20S-R33E
Existing Access Roads:

Scale 1 : 24,000
1" = 2000 ft

TN
MN
8.9°E

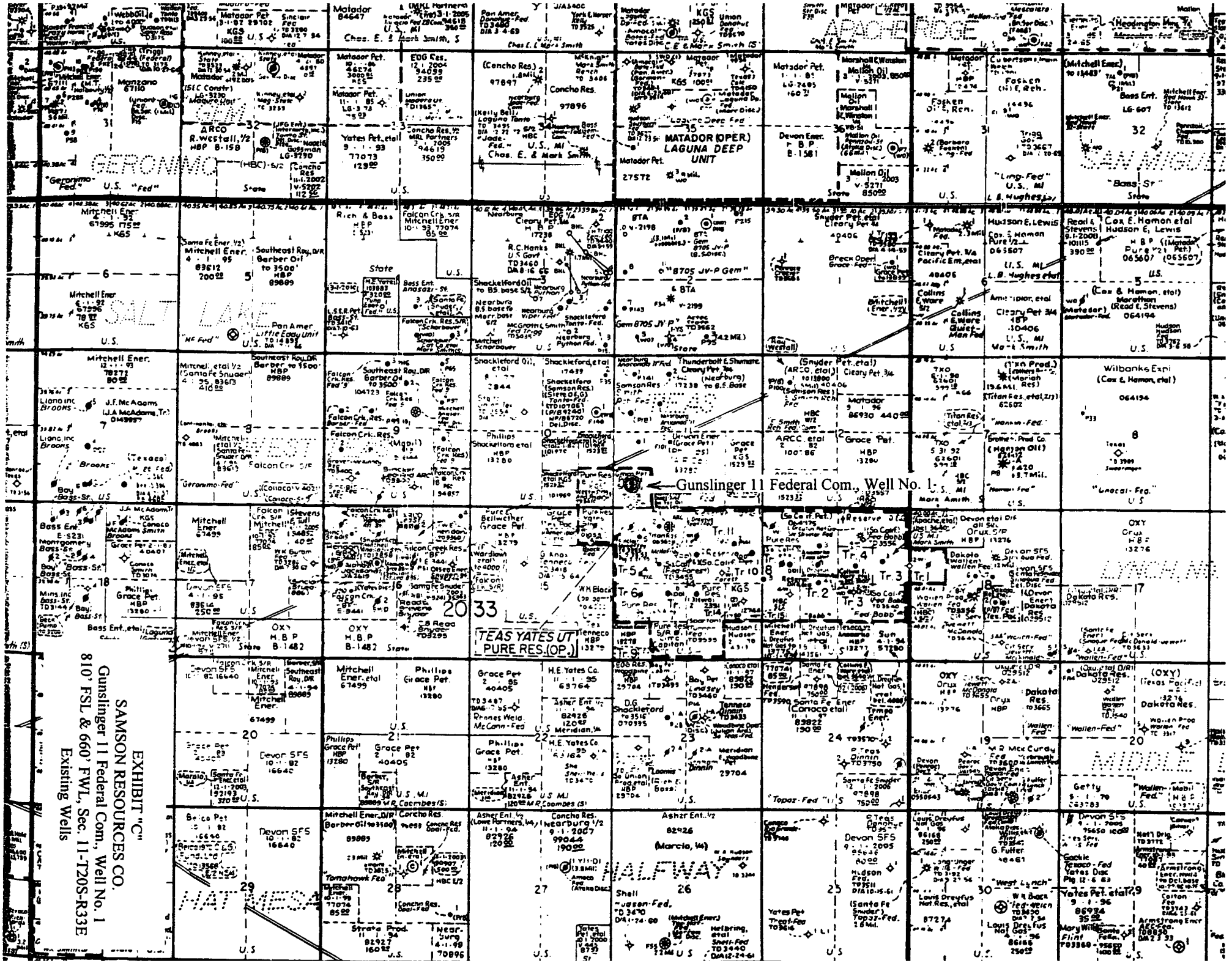
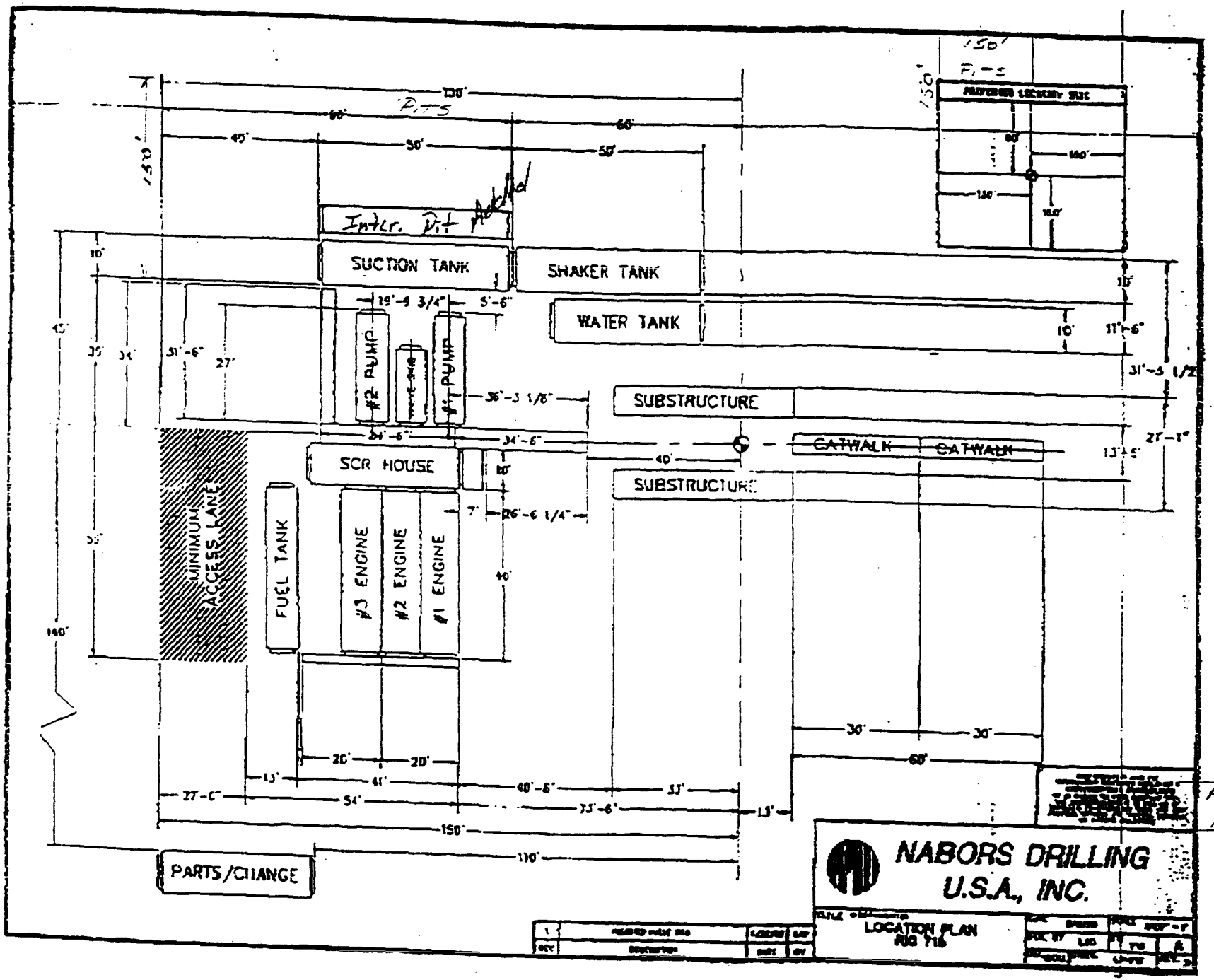

Gunslinger 11 Federal Com., Well No. 1
EXHIBIT "C"
SAMSON RESOURCES CO.
Gunslinger 11 Federal Com., Well No. 1
810' FSL & 660' FWL, Sec. 11-T20S-R33E
Existing Wells

EXHIBIT "D"
SAMSON RESOURCES CO.
Gunslinger 11 Federal Com., Well No. 1
Pad & Pit Layout



RIG 715 BOP LAYOUT

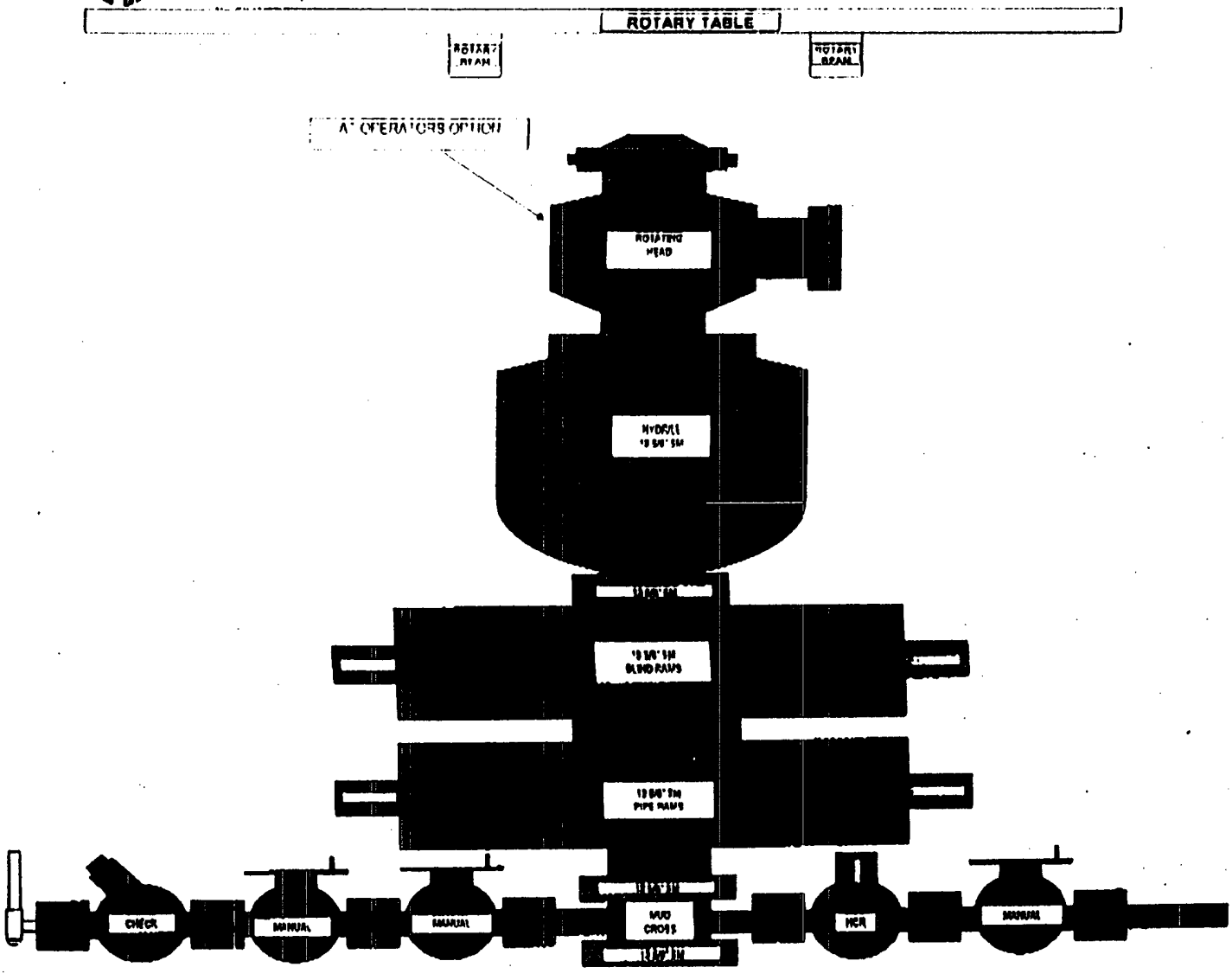
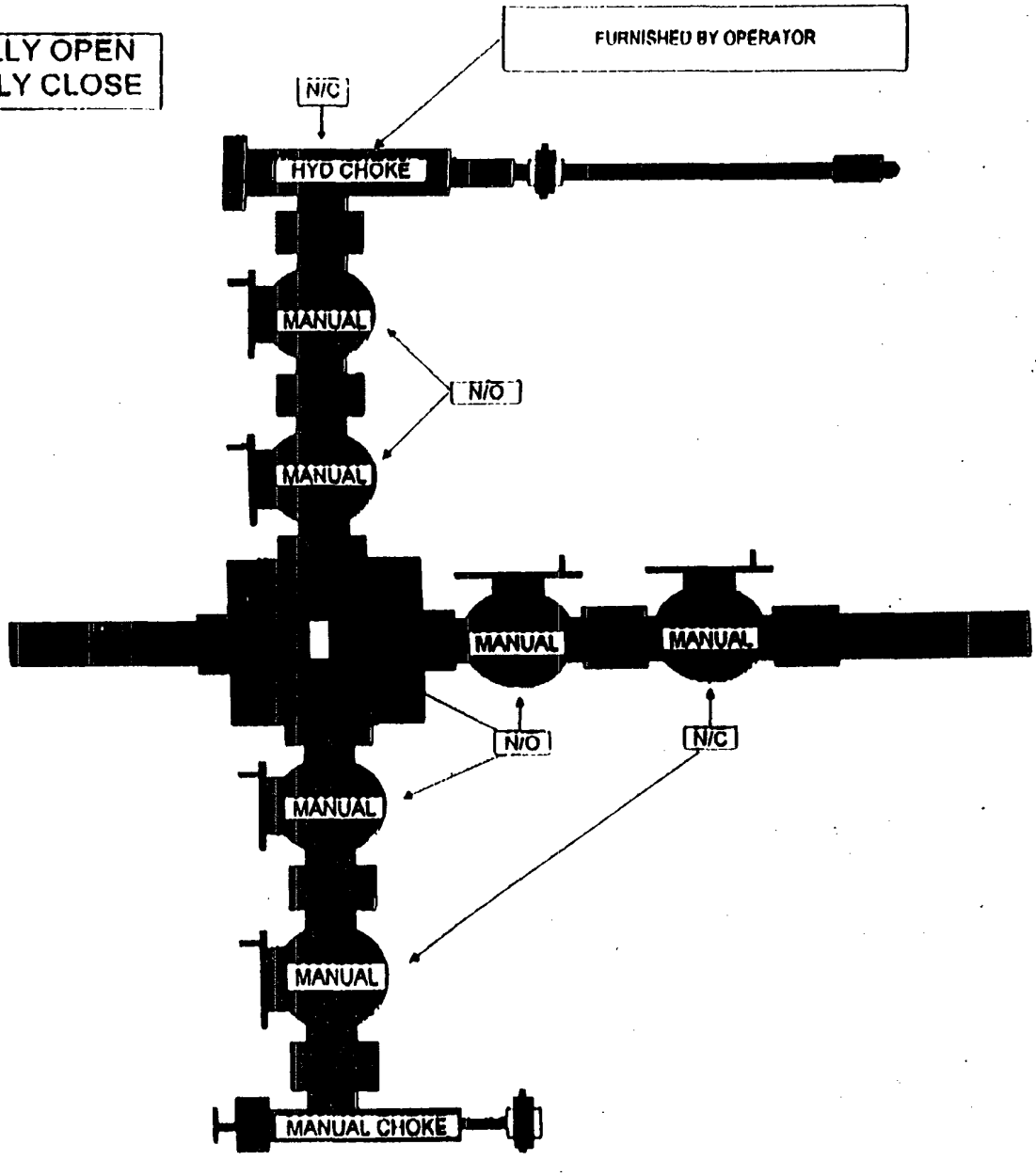


EXHIBIT "E"
SAMSON RESOURCES CO.
Gunslinger 11 Federal Com., Well No. 1
BOP Specifications

N/O = NORMALLY OPEN
N/C = NORMALLY CLOSE



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

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

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: SAMSON RESOURCES CO Telephone: 918/591-1386 e-mail address: TKOSCELNY@SAMSON.COM
Address: TWO WEST SECOND ST., TULSA, OK 74103-3103
Facility or well name: GUNSLINGER 11 FED COM #1 API #: 30-025-36797 U/L or Qtr/Qtr SW Sec 11 T 20S R 33E
County: LEA Latitude 32 34 52.11 Longitude 103 28 23.56 NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☐

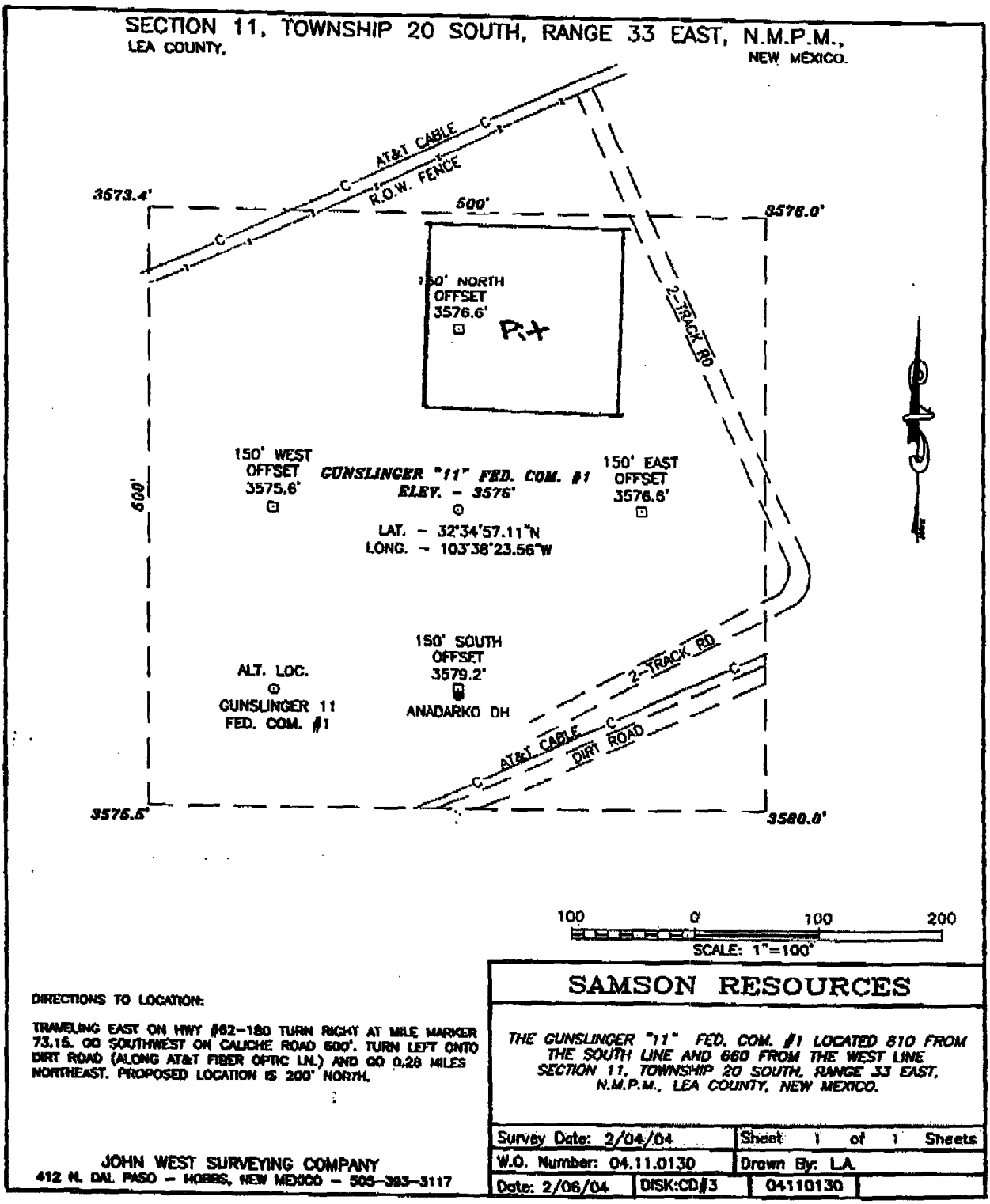
Pit	Below-grade tank	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 32,000 bbl	Volume: ____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	10

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.
Date: 8/2/04
Printed Name/Title TOM KOSCELNY, ENVIRONMENTAL SUPERVISOR Signature

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Date: 8/2/04
Printed Name/Title PETROLEUM ENGINEER Signature



DIRECTIONS TO LOCATION:

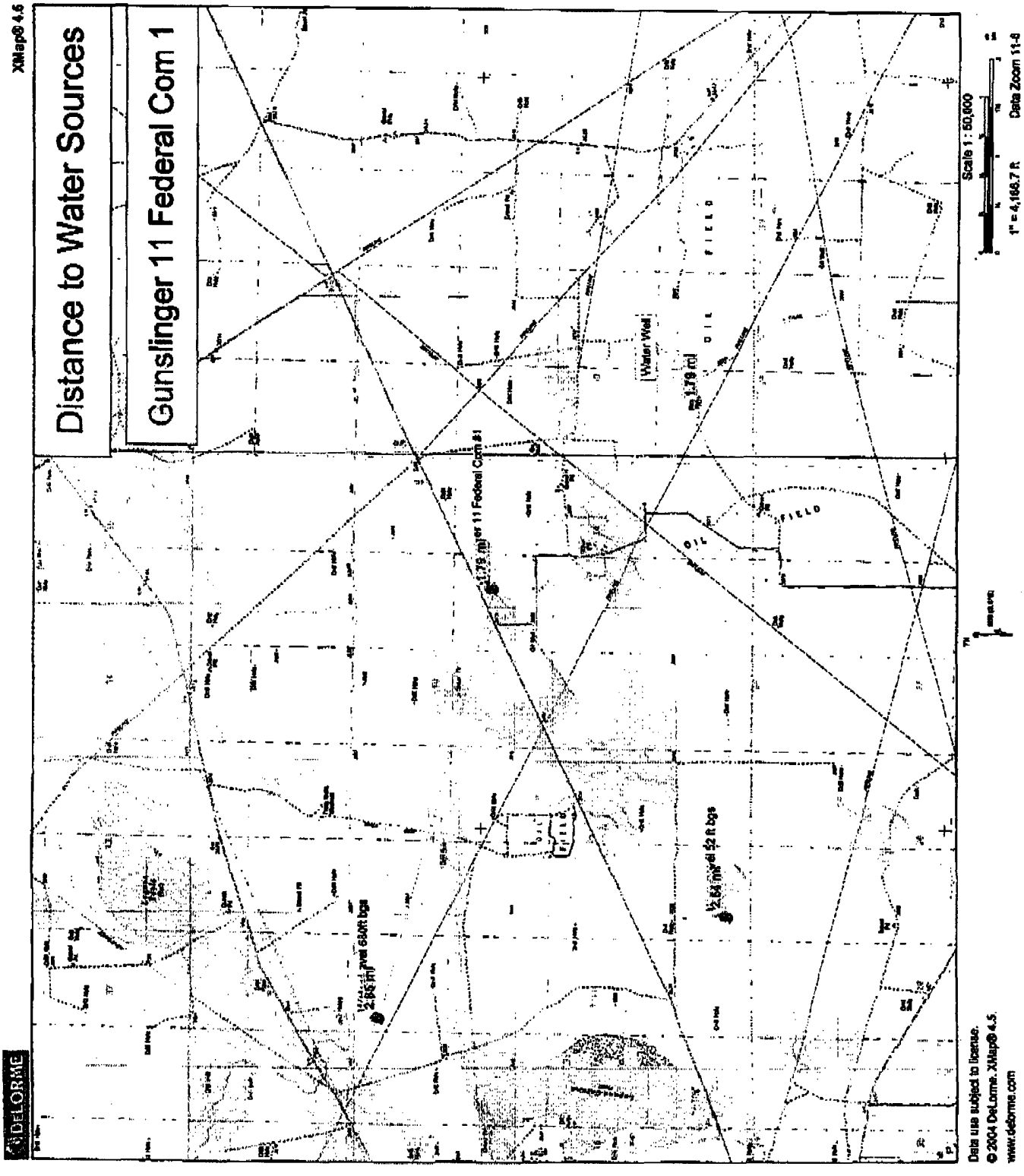
TRAVELING EAST ON HWY #62-180 TURN RIGHT AT MILE MARKER 73.15. GO SOUTHWEST ON CALICHE ROAD 600'. TURN LEFT ONTO DIRT ROAD (ALONG AT&T FIBER OPTIC LN.) AND GO 0.28 MILES NORTHEAST. PROPOSED LOCATION IS 200' NORTH.

JOHN WEST SURVEYING COMPANY
412 N. DAL PASO - HOBBS, NEW MEXICO - 505-393-3117

SAMSON RESOURCES

THE GUNSLINGER "11" FED. COM. #1 LOCATED 810 FROM THE SOUTH LINE AND 660 FROM THE WEST LINE SECTION 11, TOWNSHIP 20 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 2/04/04	Sheet 1 of 1 Sheets	
W.O. Number: 04.11.0130	Drawn By: LA	
Date: 2/06/04	DISK:CD#3	04110130


Distance to Water Sources
Gunslinger 11 Federal Com 1
XMap® 4.6
DeLORME
Water Well
1.79 mi
1.79 miles 11 Federal Com #1
2.86 mi
2.64 mi
Scale 1 : 50,600
1" = 4,166.7 ft
Data Zoom 11-8
Data use subject to license.
© 2004 DeLorme. XMap® 4.5.
www.delorme.com