

New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88240
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM-0202296
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Samson Resources		7. If Unit or CA Agreement, Name and No.
3a. Address Samson Plaza—Two W. 2nd St. Tulsa, OK 74103	3b. Phone No. (include area code) (918) 591-1821	8. Lease Name and Well No. Minis "2" Federal, Well # 3
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2938' FNL & 660' FEL At proposed prod. zone same		9. API Well No. 30-025-36131
14. Distance in miles and direction from nearest town or post office* 39 miles northeast of Carlsbad, NM		10. Field and Pool, or Exploratory Widowat HARTMEER; DELAWARE SOUTH EAST
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1412'	16. No. of Acres in lease 560.2	11. Sec., T., R., M., or Blk. and Survey or Area Sec. 2-T21S-R32E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 330'	19. Proposed Depth 8,100'	12. County or Parish Lea
20. BLM/BIA Bond No. on file NM-2037	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3737' GL	13. State NM
22. Approximate date work will start* December 16, 2002	23. Estimated duration 4 weeks	
24. Attachments Carlsbad Controlled Water Basin		

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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>George R. Smith</i>	Name (Printed/Typed) George R. Smith	Date 11/6/02
Title Agent for Samson Resources		
Approved by (Signature) <i>Carsten F. Goff</i>	Name (Printed/Typed) Carsten F. Goff	Date DEC 24 2002
Title Acting 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 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.

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

OPER. OGRID NO 20165 George R. Smith, agent
 PROPERTY NO. 29223
 POOL CODE 97210
 EFF. DATE 1-21-03
 API NO. 30-025-36131

CAPITAN REEF

K2

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2002 NOV -6 PM 4: 59

BUREAU OF LAND MGMT.
ROSWELL OFFICE

INW STYLE OFFICE

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico

Form C-102

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

Energy, Minerals, and Natural Resources Department

Revised August 15, 2000

Submit to Appropriate District Office

State Lease - 4 copies

Fee Lease - 3 copies

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

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-36131	² Pool Code 97210	³ Pool Name Wildcat, Delaware
⁴ Property Code 29223	⁵ Property Name MINIS "2" FEDERAL	⁶ Well Number 3
⁷ OGRID No. 20165	⁸ Operator Name SAMSON	⁹ Elevation 3730'

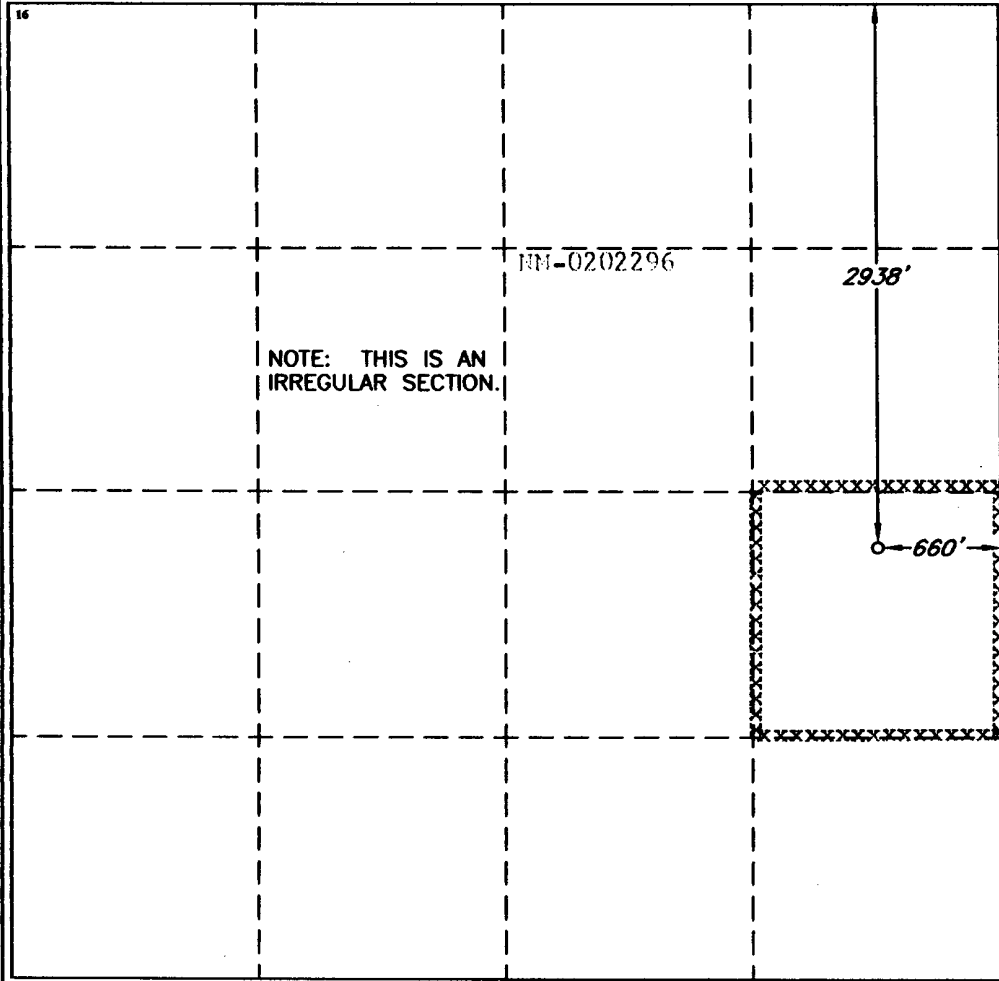
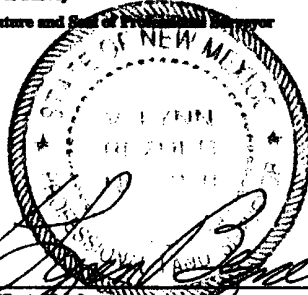
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
9	2	21 SOUTH	32 EAST, N.M.P.M.		2938'	NORTH	660'	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

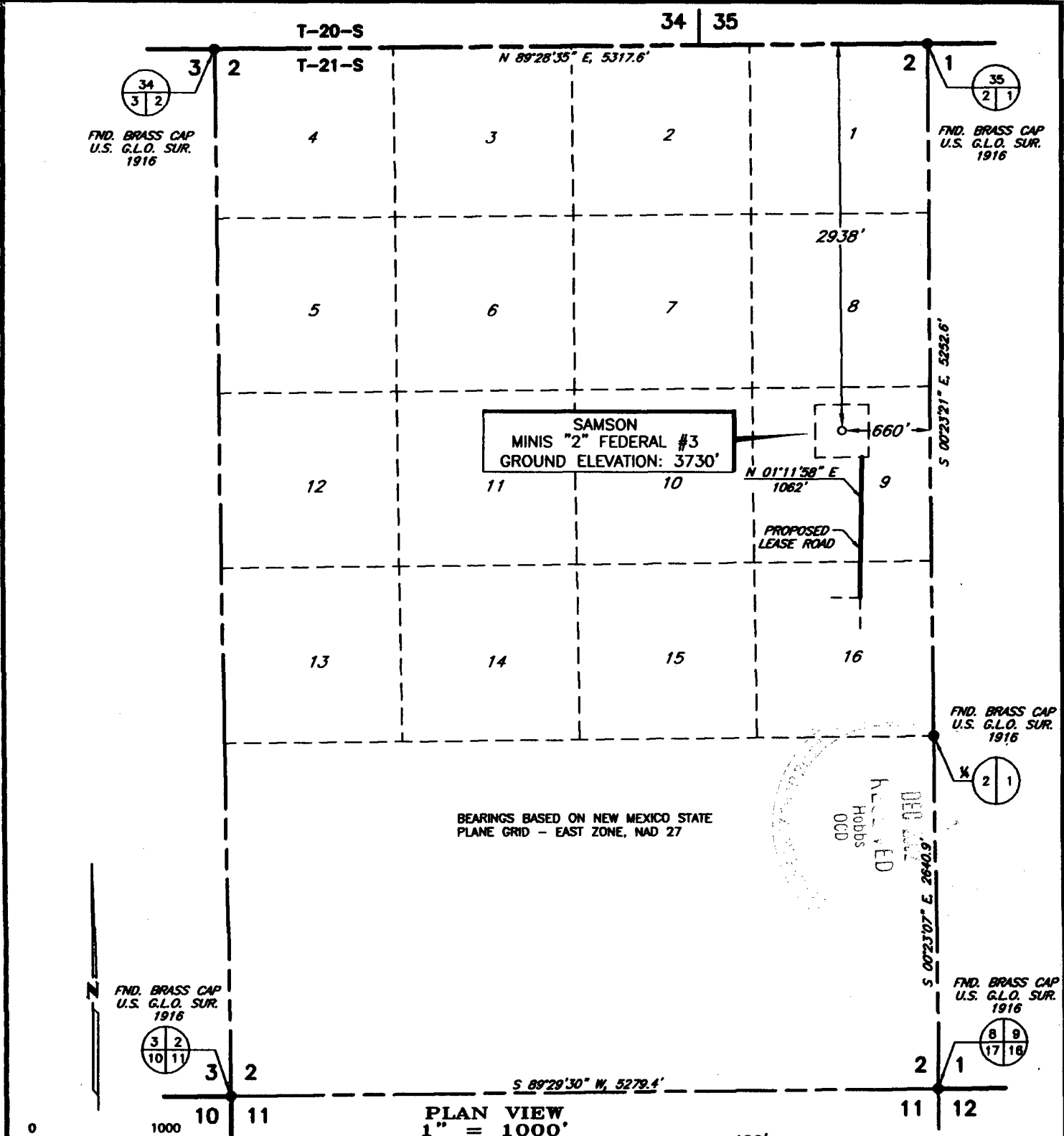
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

NOTE: THIS IS AN IRREGULAR SECTION. 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>George R. Smith</i> Signature George R. Smith Printed Name Agent Title Nov 06, 2002 Date ¹⁸ 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 supervision, and that the same is true and correct to the best of my belief. SEPTEMBER 26, 2002 Date of Survey Signature and Seal of Professional Surveyor  Certificate Number V. L. BEZNER R.P.S. #7920 JOB #83878 / 72 SW / J.C.P.
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Correct.

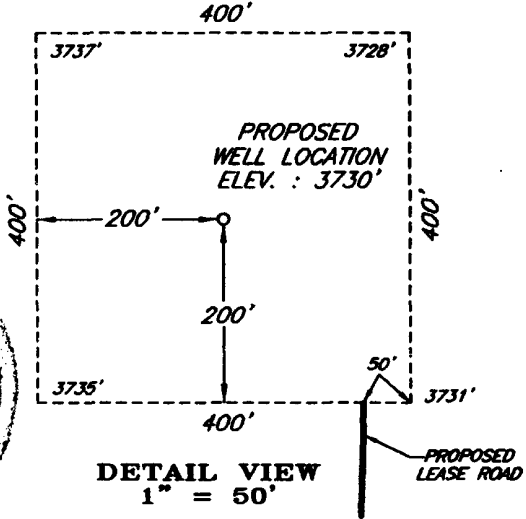
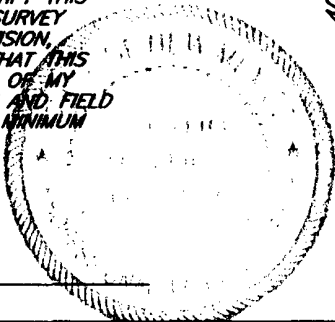
PLAT SHOWING PROPOSED
WELL LOCATION AND LEASE ROAD IN
SECTION 2, T-21-S, R-32-~~W~~N.M.P.M.
EDDY COUNTY, NEW MEXICO



DATE OF FIELD WORK: SEPTEMBER 26, 2002

I, V. L. BEZNER, A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO AND AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, HEREBY CERTIFY THIS PLAT TO BE A TRUE REPRESENTATION OF A SURVEY PERFORMED IN THE FIELD UNDER MY SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS PLAT AND FIELD SURVEY UPON WHICH IT IS BASED MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO. (RULE 500.6 EASEMENT SURVEYING)

V. L. Bezner
V. L. BEZNER, P.S. NO. 7920



				SAMSON	SCALE: AS SHOWN
					DATE: SEPTEMBER 26, 2002
NO.	REVISION	DATE	BY		JOB NO.: 83878-F
SURVEYED BY: B.K.					QUAD NO.: 72 SW
DRAWN BY: J.C.P.					
APPROVED BY: V.L.B.				SHEET : 1 OF 1	
				<i>SURVEYING AND MAPPING BY</i> TOPOGRAPHIC LAND SURVEYORS <i>MIDLAND, TEXAS</i>	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NM-0202296

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
Minis "2" FederalCom., Well No. 3

9. API Well No.

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Lea, New Mexico

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Samson Resources Co.

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

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

4. Location of Well (Footage, Sec., T. R., M., or Survey Description)
2938' FNL & 660' FEL, Sec. 2-T21S-R32E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

See attached Exhibit "Application for Drilling" first page for the folloing changes in the drilling program:

1. Paragraph 4--Proposed Casing Program
2. Paragraph 6-- Mud Program

RECEIVED
Hobbs
OCD

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

George R. Smith

Title Agent for Samson Resources Co.

Signature

George R. Smith

Date December 4, 2002

Approved by (Signature)

/s/ JOE G. LARA

Name
(Printed/Typed)

/s/ JOE G. LARA

Title *Petroleum Engineer*

Conditions of approval, if any, are attached. Approval of this notice 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.

Office
CARLSBAD FIELD OFFICE

Date **DEC 17 2002**

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.

(Continued on next page)

APPLICATION FOR DRILLING

SAMSON RESOURCES CO.

Minis "2" Federal, Well No. 3

2938' FNL & 660' FEL, Sec. 2-R21S-R32E

Lea County, New Mexico

Lease No.: NM-0202296

(Exploratory 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:

Top of Salt	1,500'
Yates	3,130'
Capitan	3,529'
Delaware	5,300'
T.D.	8,100'

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

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' - 1,590'	Circ. 1282 sx. Hall. Prem Plus
14 3/4"	11 3/4"	65.0#	P110	BT&C	0' - 850'	
14 3/4"	11 3/4"	60.0#	N-80	BT&C	850' - 3,150'	Circ 1200 sx HLC Prem Plus
10 5/8"	8 5/8"	32.0#	N-80	LT&C	0' - 5,350'	Circ. 2550 sx Interfill C & Prem
7 7/8"	5 1/2"	20.0#	P110	LT&C	0' - 8,100'	109 sx Interfill H & super H TOC 7,400'

5. Minimum Specifications for Pressure Control Equipment:

A 11" 5000 psi WP Shaffer, LWS Double Gate BOP will be installed on the 13 3/8" and operated as a 3000 psi system.

The casing and BOP will be tested as per Onshore Oil & Gas Order #2 to the maximum of 1500 psi. (IIIBh) Casing and BOP will be tested before drilling out with the 12 1/4 and 7 7/8".

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 1,590': Fresh water mud:	8.6 - 9.0 ppg	32 - 36	No W/L control
1,590' - 3,150': Fresh/native Brine mud:	10.0 - 10.1 ppg	28 - 29	No W/L control
3,150' - 7,800': FW mud/plus add.	8.4 - 8.5 ppg	28 - 29	No W/L control
7,800' - 8,100': F/Water/polymer:	8.5 - 8.6 ppg	30 - 33	W/L control 20cc +/-

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

SAMSON RESOURCES CO.

Minis "2" Federal , Well No. 3

Page 2

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 = 3564 psi and surface pressure of 1782 psi with a temperature of 141°.

10. H₂S: None expected. The Minis "2" Fed. #1 well has been tested with no H₂S present in production of the Delaware.

11. Anticipated starting date: December 9, 2002.

Anticipated completion of drilling operations: Approximately 4 weeks.

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 08-08-00 BY 000

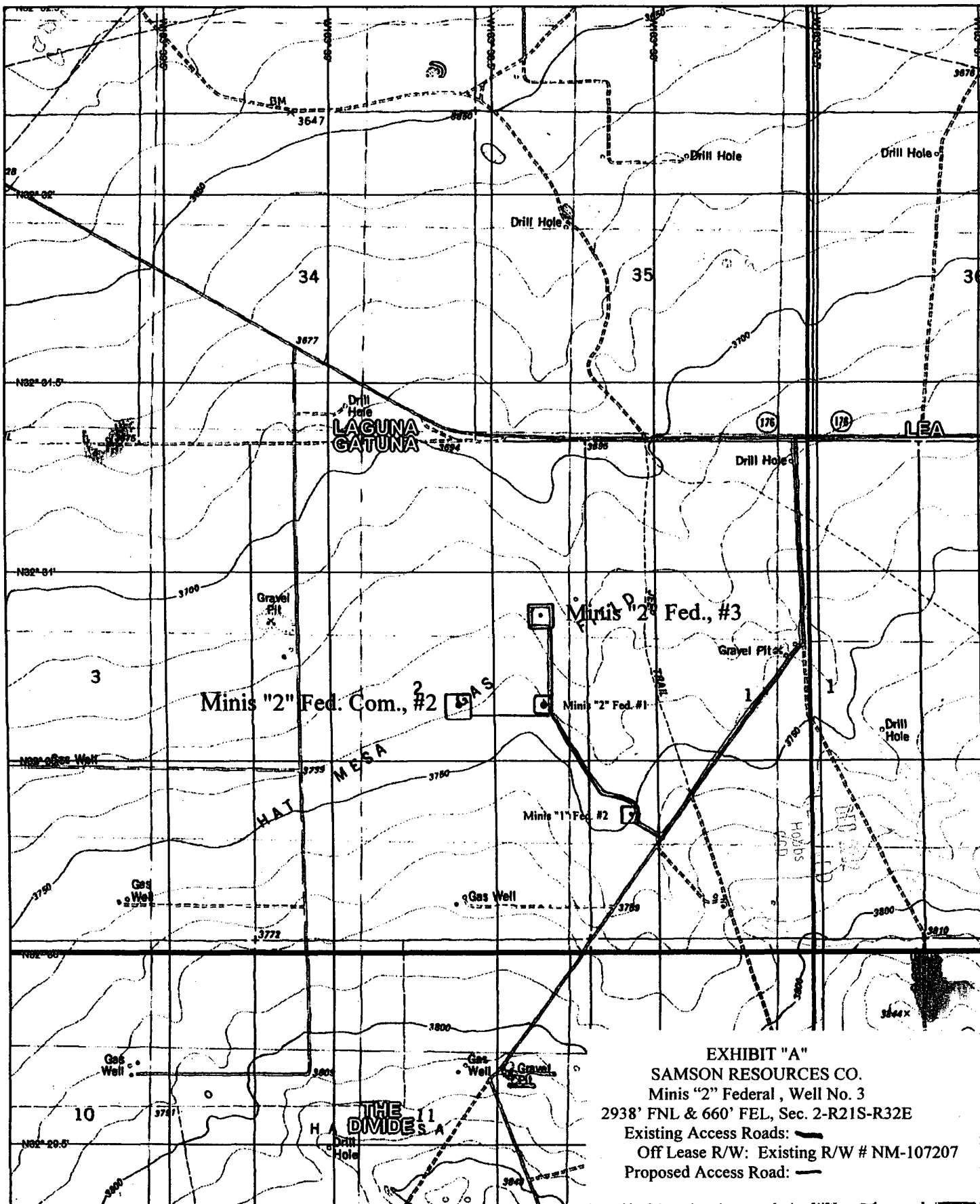


EXHIBIT "A"
SAMSON RESOURCES CO.
 Minis "2" Federal, Well No. 3
 2938' FNL & 660' FEL, Sec. 2-R21S-R32E
 Existing Access Roads: —
 Off Lease R/W: Existing R/W # NM-107207
 Proposed Access Road: —

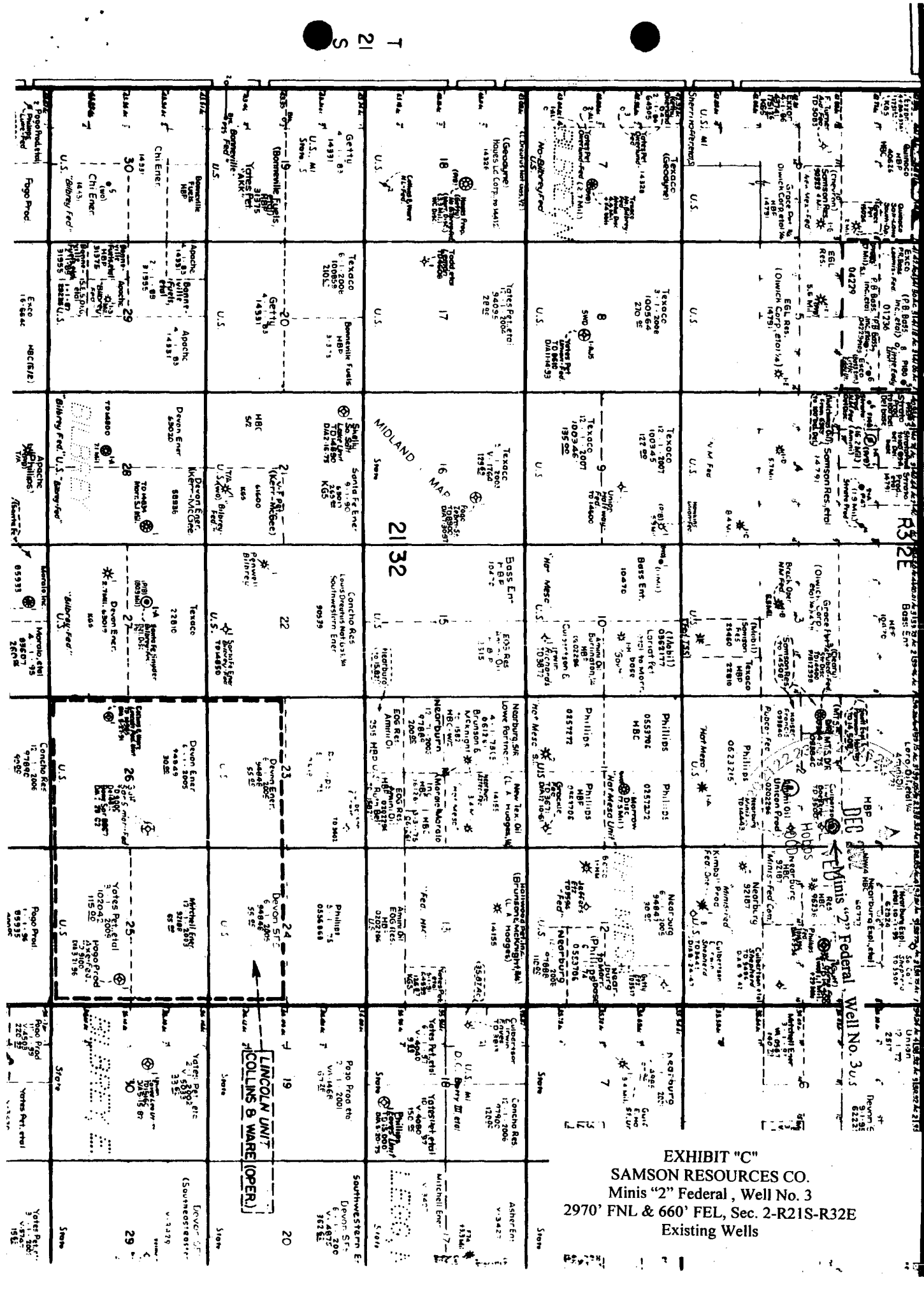


EXHIBIT "C"
SAMSON RESOURCES CO.
Minis "2" Federal , Well No. 3
2970' FNL & 660' FEL, Sec. 2-R21S-R32E
Existing Wells

BLOWOUT PREVENTOR ARRANGEMENT

11" SHAFFER TYPE LWS, 5000 psi WP

11" CAMERON SPHERICAL, 5000 psi WP

120 GALLON, 5 STATION KOOMEY ACCUMULATOR

5000 psi WP CHOKE MANIFOLD

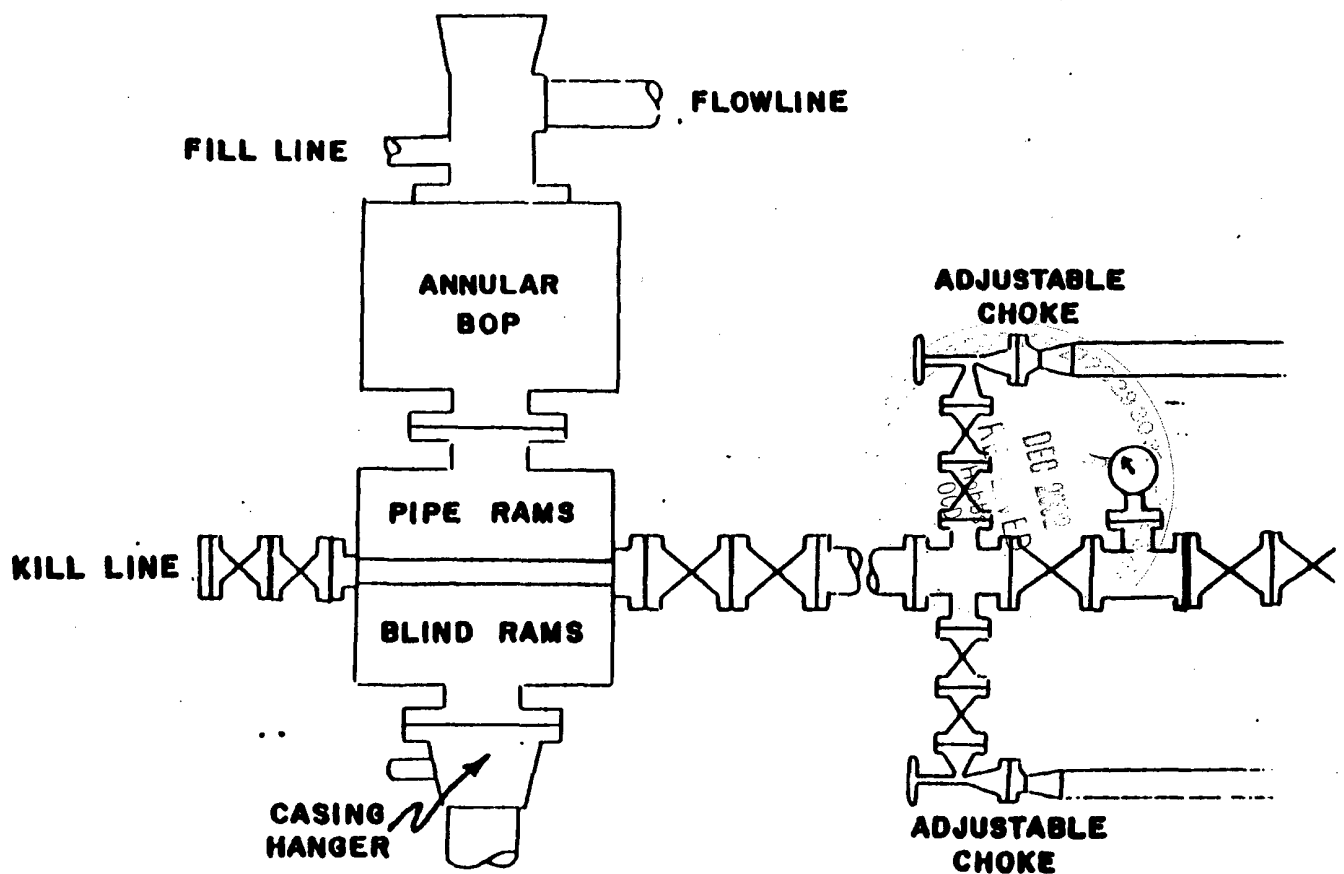


EXHIBIT "E"
SAMSON RESOURCES CO.
Minis "2" Federal, Well No. 3
BOP Specifications