OCD-ARTESIA DEC 20 2007

OCD-ARTESIA

Form 3160-3
(August 2007)

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
NM-0480904

6. If Indian, Allotee or Tribe Name

1a Type of work ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No
ROSS DRAW# 29

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

8 Lease Name and Well No
ROSS DRAW# 29 11808

2 Name of Operator J.C. WILLIAMSON 11158

9 API Well No
30-015-36009

3a. Address 214 WEST TEXAS, SUITE 1250
MIDLAND, TX 79701

3b Phone No. *(include area code)*
(432) 682-1797

10 Field and Pool, or Exploratory
ROSS DRAW Delaware

4 Location of Well *(Report location clearly and in accordance with any State requirements *)*

At surface 1980 FWL 660 FSL

At proposed prod zone 1980 FWL 660 FSL N

11 Sec., T. R. M. or Blk. and Survey or Area
SEC 22 T26S R30E

14 Distance in miles and direction from nearest town or post office*
34 MILES SOUTHEAST OF CARLSBAD, NEW MEXICO

12. County or Parish
EDDY

13 State
NM

15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 1980-J-NL	16 No of acres in lease 640	17 Spacing Unit dedicated to this well 40
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 1980	19 Proposed Depth 7000'	20 BLM/BIA Bond No on file NM 2469
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3028 GL	22 Approximate date work will start* 12/01/2007	23 Estimated duration 20 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must 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 must 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 BLM

25 Signature	Name *(Printed Typed)*	Date
	RALPH E. WILLIAMSON	11/05/2007

Title
CHIEF OPERATING OFFICER

Approved by *(Signature)* /s/ Don Peterson	Name *(Printed/Typed)* /s/ Don Peterson	Date DEC 18 2007
Title FIELD MANAGER	Office CARLSBAD FIELD 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 TWO YEARS

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 page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
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
	52790	

Property Code	Property Name	Well Number
	ROSS DRAW UNIT	29

OGRID No.	Operator Name	Elevation
11158	J.C. WILLIAMSON	3028'

Surface Location

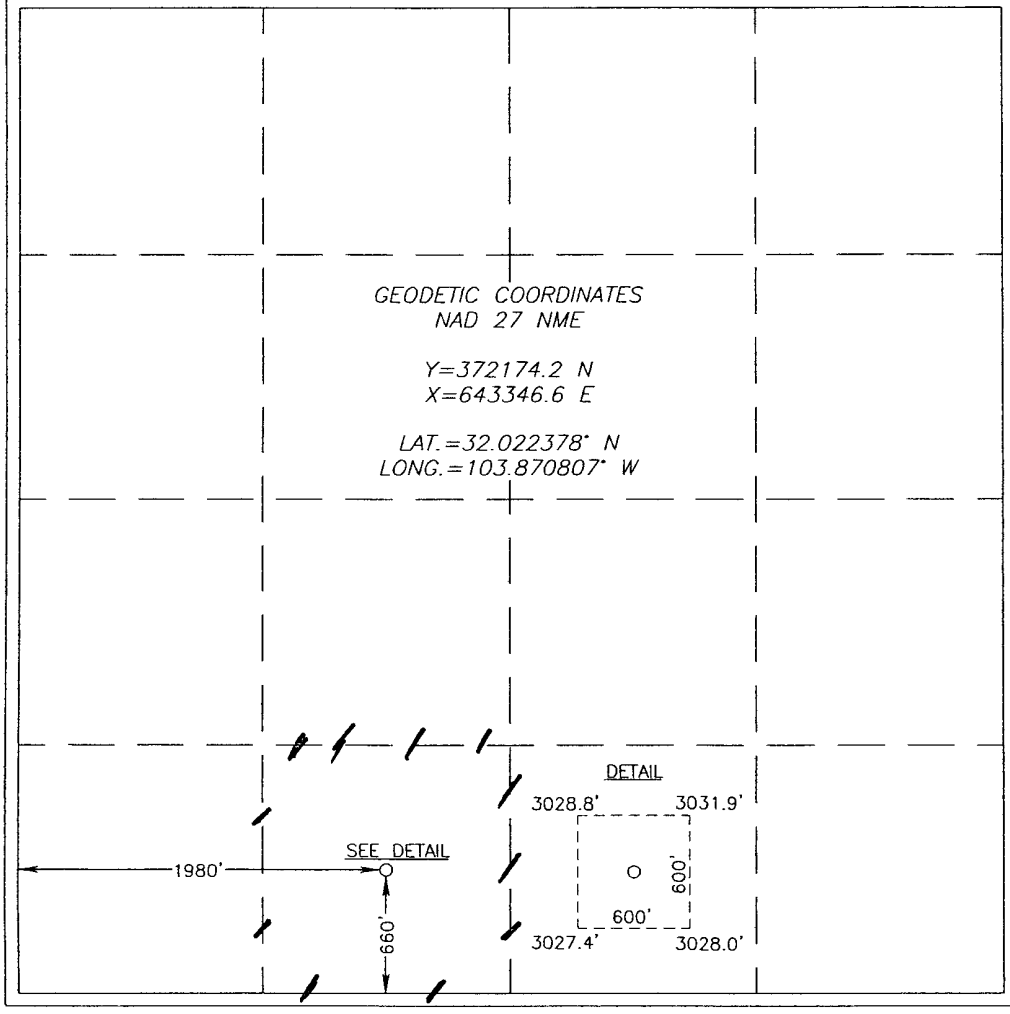
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	22	26-S	30-E		660	SOUTH	1980	WEST	EDDY

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.
40			

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 that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Ralph Ellwanger 11/5/07
Signature Date

Ralph E. Williamson
Printed Name

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.

Date Surveyed: 10/17/2007 AR

Signature & Seal of Professional Surveyor

RONALD J. EIDSON NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

Ronald J. Eidson 10/26/07

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

APPLICATION FOR DRILLING
J.C. WILLIAMSON
WELL ROSS DRAW #29
1980 FWL, 660 FSL, Sec 22, T26S, R30E
Eddy County, New Mexico
Lease No. NM-0480904

DRILLING PROGRAM

1. Geologic Name of Surface Formation

a. Quaternary Alluvium

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a.	Rustler Anhydrate	500'	Water
b.	Upper Salt	1100'	Impervious
c.	Delaware Sand	3460'	Oil
d.	Cherry Canyon	4400'	Oil
e.	Brushy Canyon	5700'	Oil
	Delaware →	7000'	" per operator 12/12/07

No other formations are expected to yield oil, gas or fresh water in measurable volumes in this well. The surface fresh water sands will be protected by setting 13 3/8" casing at 500' and circulating cement back to surface. The Delaware Sand intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 8 5/8" casing.

3. Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17 1/2"	0' –500'	13 3/8" new	48#	ST&C	H-40	1.97	3.70	9.01 J
11"	500'–3400'	8 5/8" new 2300 / 1100	24# / 32#	ST&C	K-55	1.18	1.73	3.44 J
7 7/8"	3400'-7000'	5 /12" new 5 1/2"	15.5#	LT&C	K-55	~~1.21~~ 1.12	1.31	1.89 J

see COA

4. Cement Program: (Note yields; and DV tool depth if multiple stages)

a. 13 3/8" Surface — Cement circulated to surface with 750 sx 35/65 Poz C, 2% CaCl, 1/4pps Celloflake, 6% Bentonite, 12.8 ppg yield, 1.70 followed by; 500 sx C, 2% CaCl, ¼ pps Celloflake/sx weight, 14.8 ppg, 1.32 yield, TOC at surface.

b. 8 5/8" Intermediate — Cement to 1000' from surface with 1000 sx 35/65 Poz C, 2% NaCl, 1/4 pps Celloflake/sx, 6

See COA

			% Bentonite, 12.8 ppg yield 1.72, followed by 500 sx 35/65 Poz C, 2% NaCl, ¼ pps Celloflake/sx, 6% Bentonite, weight is ~~12.8~~ 14.8 ppg, per operator 12/13/07 1.32 yield, TOC 1000'. ← See COA
	c.	5 1/2"	Production	Cement 1st stage w/ 1000 sx 60/35 Poz cement, 6# NaCl, ¼# Celloflake per sx @ 14.8 ppg, 1.32 ppg yield, DV tool @ 4500'; 2nd stage 1000 sx, 65/35 Poz, 6# NaCl, ¼ # Celloflake/sx @ 14.8 ppg, 1.32 ppg yield, estimated top of cement 2900'.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 8 5/8" casing shoe. All casing is new and API approved or drifted and tested used pipe.

5. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventor. Unit will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. The drilling head will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to **1200 psi with the rig pump before drilling out the 13 3/8" casing shoe (70% of 48#, H-40 casing).** Prior to drilling out the 8 5/8" casing shoe, the BOP's will be tested as per BLM Drilling Operations Order #2.

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 3000 psi WP rating.

6. Proposed Mud Drilling Program

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0' – 600'	8.4	32-40	NC	Fresh Water
500' – 3400'	9.5-9.9	29-33	NC	Fresh Water/Cut Brine
2400'–7000'	9.5–9.9	29	NC	Cut Brine

See COA

The necessary mud products for weight addition and fluid loss control will be on location at all times, and will be used as necessary.

7. Auxiliary Well Control and Monitoring Equipment:

a. A Kelly cock will be in the drill string at all times.
b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

8. Logging, Coring, and Testing Program:

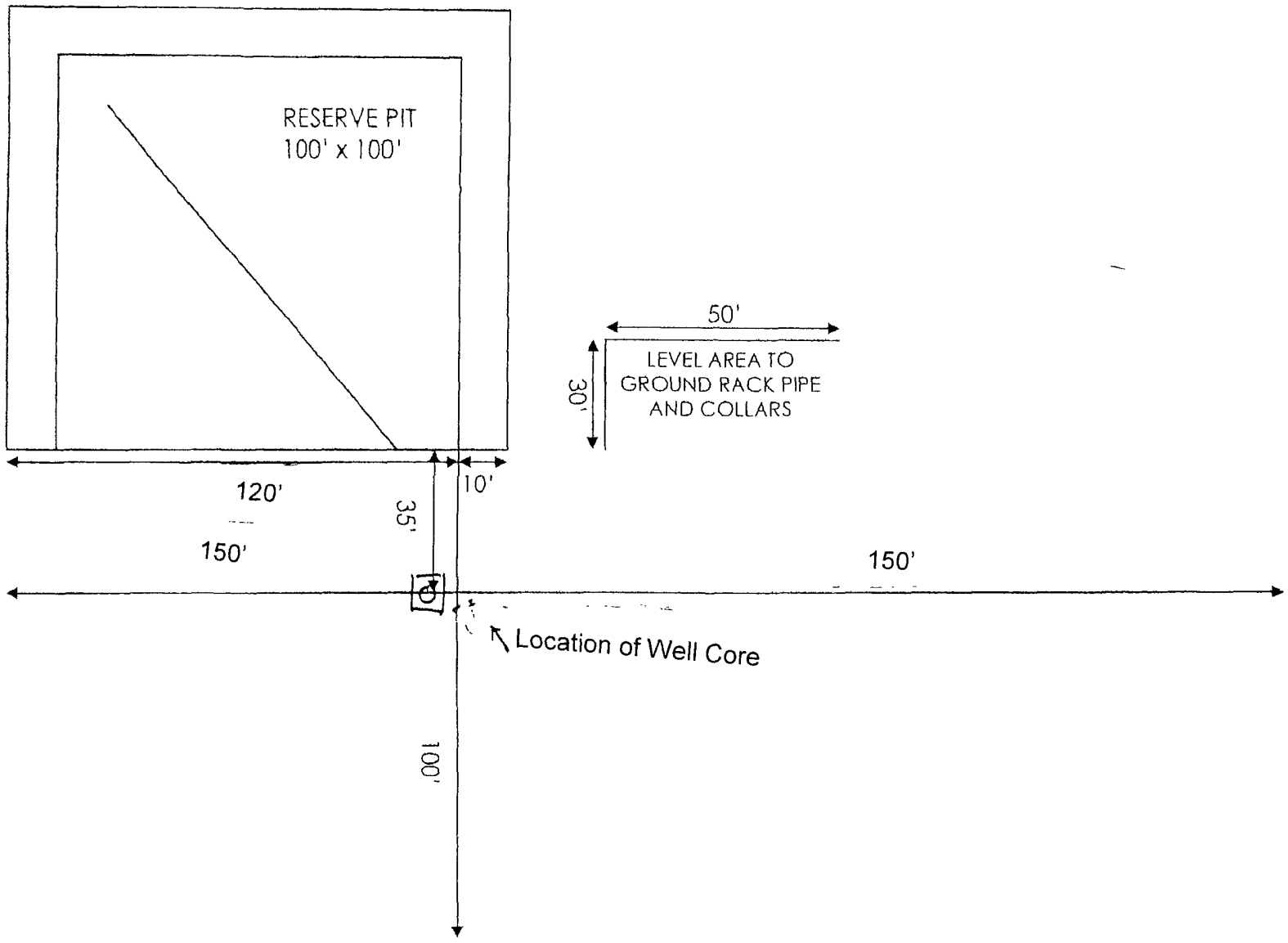
a. Drill stem tests will be based on geological sample shows.
b. The open hole electrical logging program will be:
    i. Total Depth to Intermediate Casing: Dual Laterolog-Micro Laterolog with SP and Gamma Ray; Compensated Neutron – Z Density log with Gamma Ray and Caliper.
    ii. Total Depth to Surface Compensated Neutron with Gamma Ray
    iii. No coring program is planned
    iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests, and electronic logs to be run may be adjusted depending on well conditions.

9. Potential Hazards:

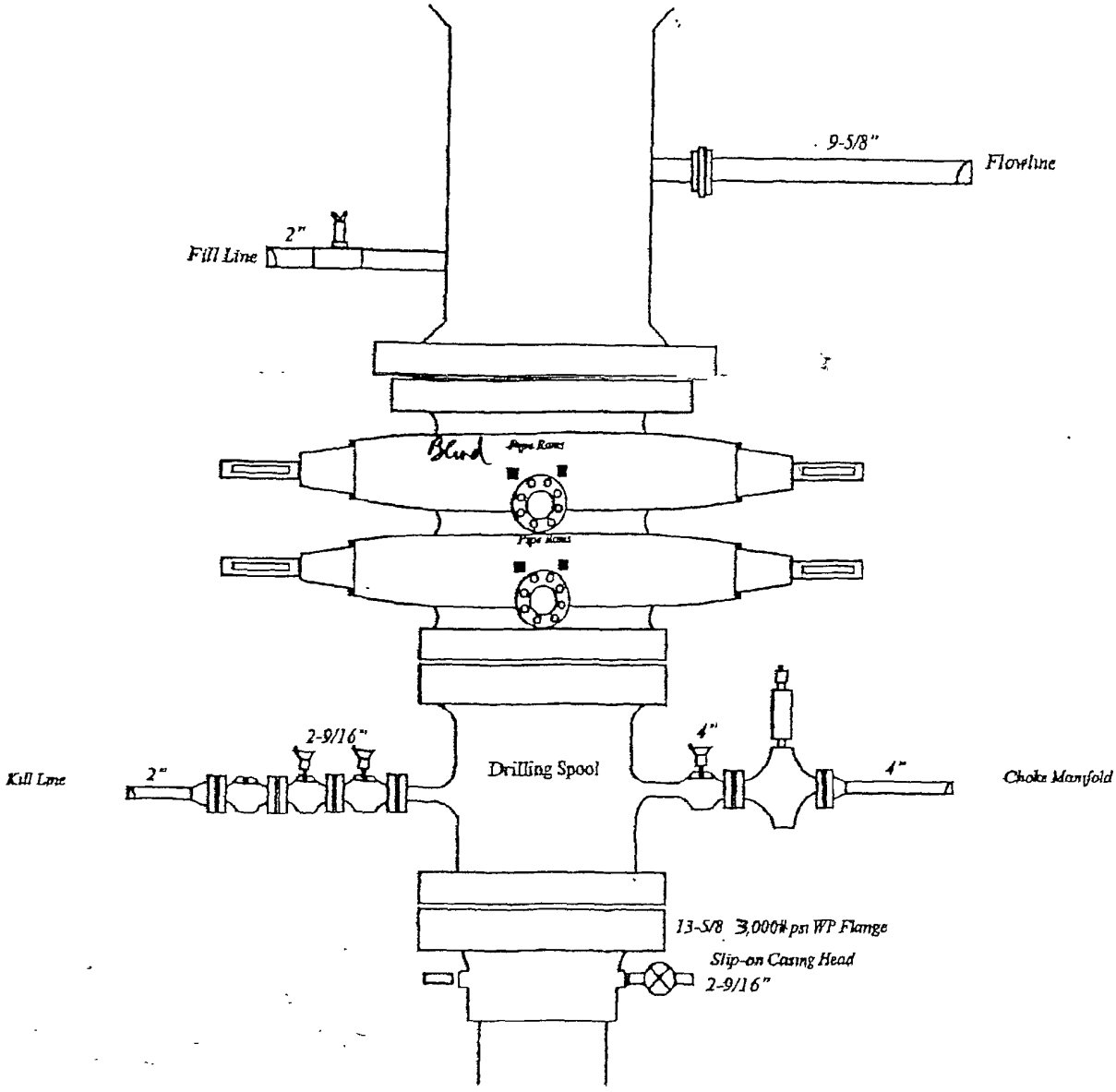
a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur, but if loss of circulation does occur, lost circulation materials will be on location to control said loss. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3500 psi and Estimated BHT 150°. No H2S is anticipated to be encountered.

10. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 20 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines to existing facilities in order to place well on production.


RESERVE PIT
100' x 100'
50'
30'
LEVEL AREA TO
GROUND RACK PIPE
AND COLLARS
120'
10'
35'
150'
150'
Location of Well Core
100'

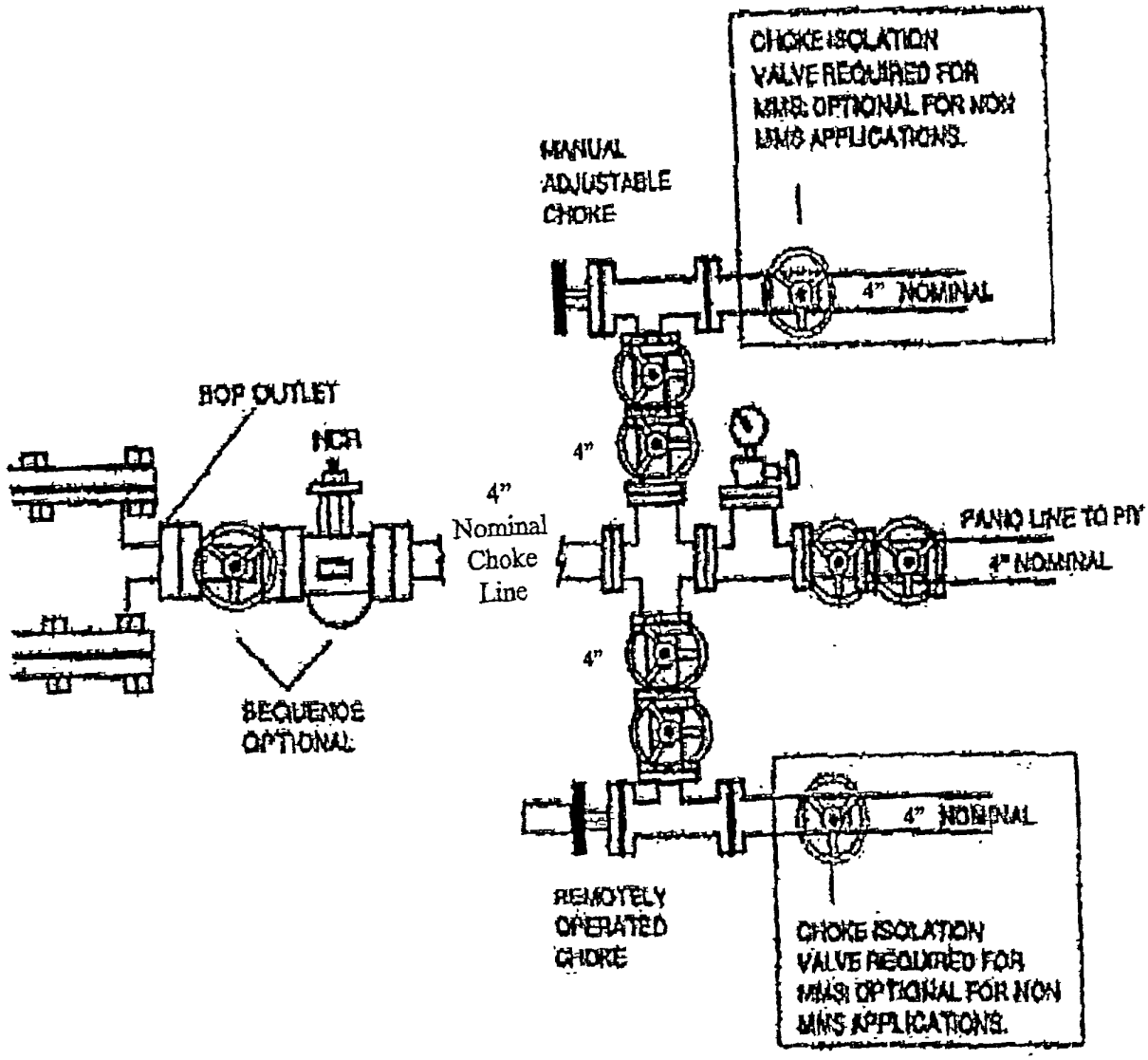
Blowout Preventor



REVISED EXHIBIT

J.C. WILLIAMSON
WELL ROSS DRAW #29
1980 FWL, 660 FSL, Sec 22, T26S, R30E
Eddy County, New Mexico
Lease No. NM-0480904

DRILLING OPERATIONS
CHOKE MANIFOLD
3M SERVICE



REVISED EXHIBIT

J.C. WILLIAMSON
WELL ROSS DRAW #29
1980 FWL, 660 FSL, Sec 22, T26S, R30E
Eddy County, New Mexico
Lease No. NM-0480904

SURFACE USE AND OPERATIONS PLAN

J.C. WILLIAMSON
ROSS DRAW UNIT # 29
1980' FWL, 660' FSL, Sec 22, T26S, R30E
Eddy County, New Mexico
Lease No. NM-0480904

1. EXISTING ROADS:

Vicinity map Exhibit "A" is a portion of a road map showing the location of the proposed well. Access to the location will be gained by using an existing road which leads west from Lea County 1 , some 13.5 miles, leading to the south line of Section 27 and connecting to existing Ross Draw lease roads as shown, or leading out to the west, connecting to county road 52 which connects to the Jal - Orla Hwy (652).

2. PLANNED ACCESS ROAD:

A. SURFACING MATERIAL: Some surfacing material may be needed for the prepared location, if necessary, 4" caliche, watered and compacted will be used. Surfacing materials where needed will be removed from an approved caliche pit, located one mile to the southwest of the location.

B. MAXIMUM GRADE: Two Percent

C. TURNOUTS: None Required

D. CULVERTS: None required

E. CUTS AND FILLS: None necessary. Only clearing and minor leveling will be required.

F. GATES AND CATTLE GUARDS: None required. No fences will need to be cut in conjunction with drilling operations.

3. LOCATION OF EXISTING WELLS:

A. Existing wells in the area are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. There are existing facilities owned and operated by J.C. Williamson that will be utilized by this lease, which are the battery and treating facilities put on the leases in association with the Ross Draw Unit # 11.

B. If the proposed well is completed for production, the tank battery for this well will be the production facility constructed for the Ross Draw # 11 well. This will be connected to this existing production facility by a 2" steel surface flowline, crossing the lease, leading along existing roads to the Ross Draw # 11 production facility.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. Fresh water necessary for drilling will be purchased and hauled to the well site over existing and proposed roads. Produced Delaware formation Brine water will be purchased, hauled, or brought by temporary surface pipeline laid down existing roads to the location for make up water in the 8-5/8", and 7-7/8" portions of the hole to be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS:

The construction materials that may be needed can be obtained from an approved pit located in SW/4 SW/4 of Sec. 26, T-26-S, R-30-E, Eddy County, New Mexico, or such other caliche pits as approved by the Bureau of Land Management.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the lined drilling pit, using pits specifically constructed for this well.

B. Drilling fluid will be allowed to evaporate in the drilling pit until the pit is dry, or removed to be used on a subsequent well.

C. All pits will be fenced with normal barbed wire fencing materials, and metal corner braces and metal T ports, to prevent livestock from entering the area.

D. Salt water received during the testing of this well, will be disposed of in the drilling pit.

E. Oil produced during test will be stored in a test tank, after which, when the well is completed, they will be transferred to the Ross Draw #11 production facility, treated, and 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 metal trash bins to prevent scattering by the wind, and will be removed for deposit in an approved sanitary land fill within 30 days the completion of drilling operations.

8. ANCILLARY FACILITIES:

A. A wellhead of this well will be laid along the edge of the proposed access road, connecting to the Ross Draw 11 battery, from which all well head effluent will be processed, sold, and properly disposed of.

9. WELL SITE LAYOUT:

A. Exhibit "D" shows the relative location and dimensions of the well pit, mud pit, trash pit, and the location of major rig components. The pits will be dug after the application is approved.

B. Only minor leveling of the well site will be required. No significant cut and fill will be necessary.

10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for continuing production operations will be removed from the location as soon as possible. Pits will be remediated as by BLM requires, and the location cleaned out of all trash and junk to leave this well site in as an aesthetically pleasing condition a possible.

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

C. After final abandonment of the well, all equipment, junk, and trash, will be removed or buried as specified, and the location cleaned. Then, any special rehabilitation and/or special vegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible.

11. OTHER INFORMATION:

A. Topography: The land surface is relatively level. Regional slope is to the southwest.

B. Soil: The top soil at the well site is gravelly loamy sand.

C. Flora and Fauna: The vegetative cover is sparse and consists of mesquite, greasewood, yucca, weeds, and sparse range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbit, rodents, reptiles, dove, and quail.

D. Ponds and Streams: The Pecos River is approximately 6 ½ miles southwest of the proposed well site. Red Bluff Reservoir is approximately 6-½ miles to the southwest of the location. There are no natural ponds or streams near the location.

E. Residence and Other Structures: There are no occupied dwellings within two miles of proposed well site. There is a windmill approximately ½ mile to the northeast of the location.

F. Archaeological, Historical, or Other Cultural Sites: None observed in the area, but the requirements for archaeological research will be complied with.

G. Land Use: Cattle grazing and hunting in season

H. Surface Ownership: Federal

12. OPERATORS REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface User Plan is as follows:

Ralph E. Williamson
Chief Project Engineer
8202 IH-35 North, Suite 490
San Antonio, Texas 78239
Office: 210.490.5700
Fax: 210.590.4705

12. OPERATORS REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface User Plan is as follows:

Ralph E. Williamson
Chief Project Engineer
8202 IH-35 North, Suite 490
San Antonio, Texas 78239
Office: 210.490.5700
Fax: 210.590.4705

13. CERTIFICATION:

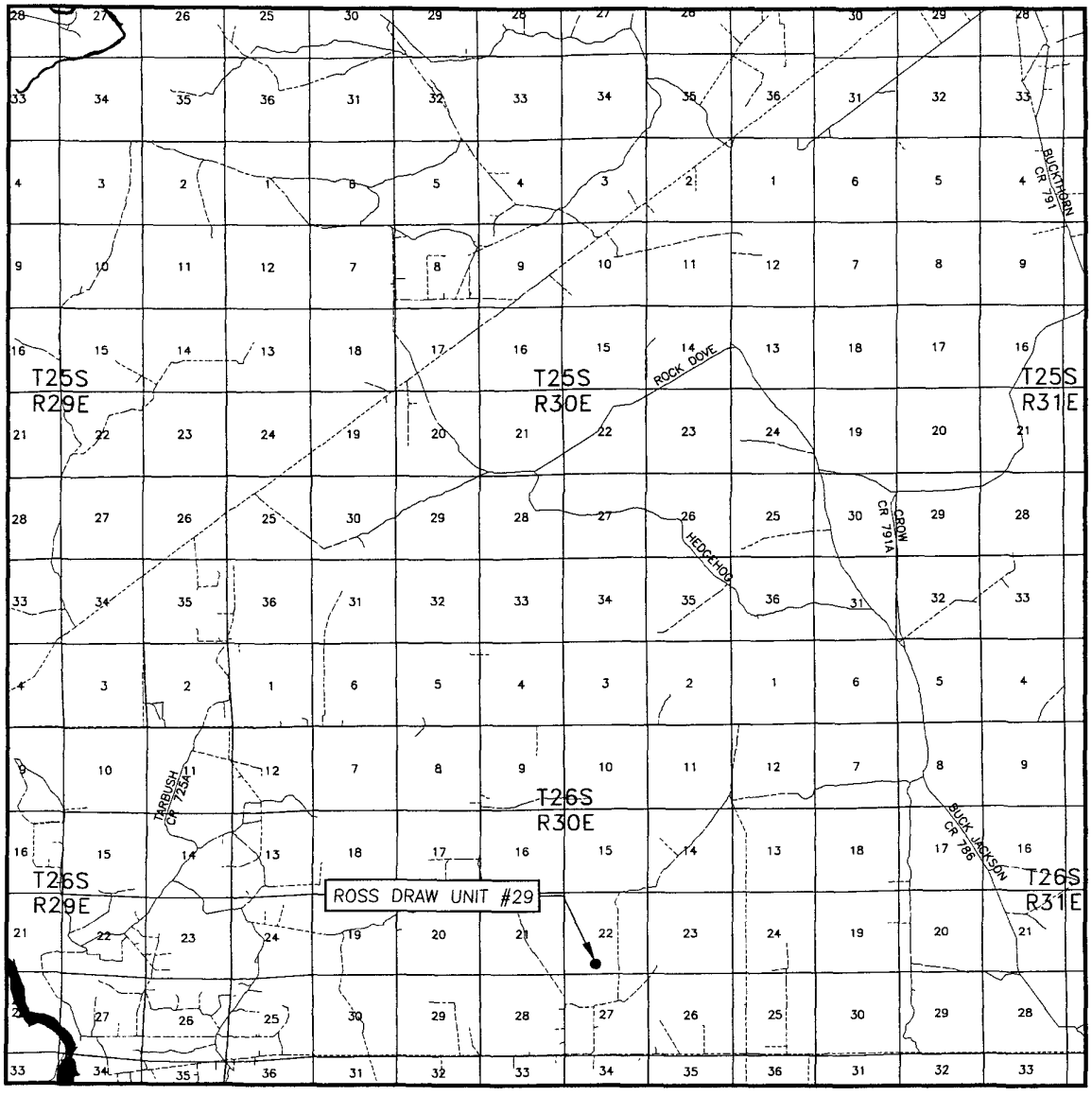
I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by J.C Williamson and its contractors and subcontractors in conformity with this plan and the term and conditions under which it is approved.

Date: 11/5/07

BY: _____
RALPH E WILLIAMSON
CHIEF PROJECT OFFICER
AGENT FOR J.C. WILLIAMSON,
OPERATOR

UE
DF Daniel Folman
12.18.07

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 22 TWP. 26-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 660' FSL & 1980' FWL

ELEVATION 3028'

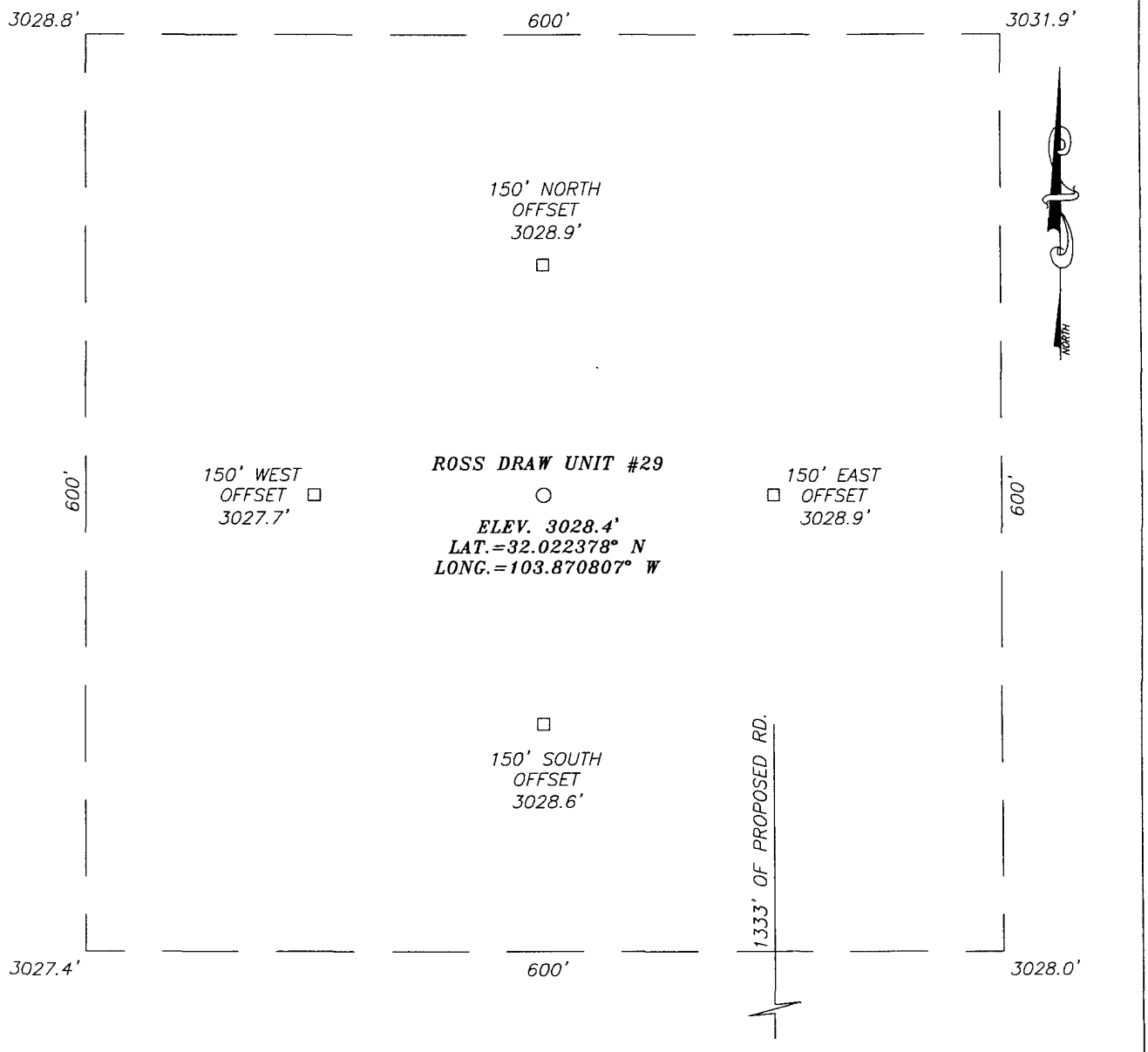
OPERATOR J.C. WILLIAMSON

LEASE ROSS DRAW UNIT

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

SECTION 22, TOWNSHIP 26 SOUTH, RANGE 30 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM ST. HWY. 128 AND CO. RD. #1 (ORLA HWY.), GO SOUTH ON CO. RD. #1 APPROX. 14.1 MILES. TURN RIGHT ON CALICHE LEASE ROAD AND GO WEST APPROX. 8.6 MILES. TURN RIGHT AND GO NORTH APPROX. 0.65 MILES. TURN RIGHT AND GO EAST APPROX. 270 FEET. TURN LEFT AND GO NORTH APPROX. .24 MILES TO PROPOSED ROAD SURVEY. FOLLOW FLAGS NORTH APPROX. 0.25 MILES TO THE SOUTHEAST CORNER OF PROPOSED PAD.

100 0 100 200 Feet

Scale:1"=100'

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

J. C. WILLIAMSON

ROSS DRAW UNIT #29 WELL
LOCATED 660 FEET FROM THE SOUTH LINE
AND 1980 FEET FROM THE WEST LINE OF SECTION 22,
TOWNSHIP 26 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 7/17/07	Sheet 1 of 1 Sheets		
W.O. Number: 07.11.0886	Dr By: AR	Rev 1:N/A	
Date: 7/25/07	Disk:	07110886	Scale:1"=100'

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although no Hydrogen Sulfide has been reported, it is always a potential hazard. If Hydrogen Sulfide is encountered, please provide measured values to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

1. The **13-3/8** inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite and above the salt at approximately 700** feet and cemented to the surface. **This depth for setting may be deeper than 700 feet due to a salt solution trough in this area. Fresh water to be used to this setting depth.**

   a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

   b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

Medium cave/karst.
Possible lost circulation in the Redbeds, evaporites to the base of the Castile group, Delaware and Bone Spring formations.

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a-d above.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **First stage to circulate.**

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **8-5/8"** intermediate casing shoe shall be **3000 (3M)** psi. **A 3M system requires an annular preventer.**

4. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

   a. The tests shall be done by an independent service company.

   b. The results of the test shall be reported to the appropriate BLM office.

c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

e. A variance to test the surface casing and BOP/BOPE to the reduced pressure of **1200** psi with the rig pumps is approved.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

PLEASE SUBMIT SUNDRIES FOR ANY CHANGES IN APPROVED DRILLING PLAN.

Engineer on call phone (after hours): Carlsbad: (575) 706-2779

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