OCD Artesia

Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

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.

SUBMIT IN TRIPLICATE *– Other instructions on page 2.*

5. Lease Serial No.
SHL NM114978 BHL NM0532769

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
ROADRUNNER FED 4H

2. Name of Operator
STRATA PRODUCTION

9. API Well No.
30-015-42080

3a. Address
PO DRAWER 1030, ROSWELL NM 88202

3b. Phone No. *(include area code)*
575-622-1127 EXT 18

10. Field and Pool or Exploratory Area
FORTY NINER RIDGE DELAWARE

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
1980 FNL & ~~775 FWL~~ 775 FEL

11. County or Parish, State
EDDY

12. CHECK THE 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
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. 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 recomplete 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

PROPOSE TO CHANGE THE SURFACE LOCATION TO 1980 FNL & 775 ~~FWL~~ FEL WHICH IS MOVING THE WELL 25' FROM THE PROPOSED ROADRUNNER FED #3. THIS CHANGE WILL ENABLE A RIG TO "SKID" FROM THE #3 TO THE #4 AND A SINGLE DRILLING PIT CAN BE UTILIZED ALSO.

THE PROPOSED WELL WILL BE DRILLED WITH THE SAME RIG AS THE ROADRUNNER FED #3 AND WILL BE DRILLED IMMEDIATELY AFTER THE #3 SO THAT THE RIG CAN BE MOVED FROM WELL TO THE NEXT.

BY KEEPING WELLHEADS ONLY 25' APART, MORE WELLS CAN BE DRILLED FROM THIS DRILLING ISLAND INSIDE THE POTASH ENCLAVE.

NM OIL CONSERVATION
ARTESIA DISTRICT
Accepted for record SEP 29 2014
NMOCD 9/29/14 RECEIVED

Mitch to send signed plat

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

Title OPERATIONS MANAGER

Signature Paul A. Ragsdale

Date 04/17/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by
/S/ STEPHEN J. CAFFEY

Title FIELD MANAGER

Date SEP 23 2014

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

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 page 2)

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

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 August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-42080	24750	Foary Nwor Ridge; Del.

Property Code	Property Name	Well Number
38771	ROADRUNNER FEDERAL	4H
OGRID No.	Operator Name	Elevation
21712	STRATA PRODUCTION CO.	3254

Surface Location

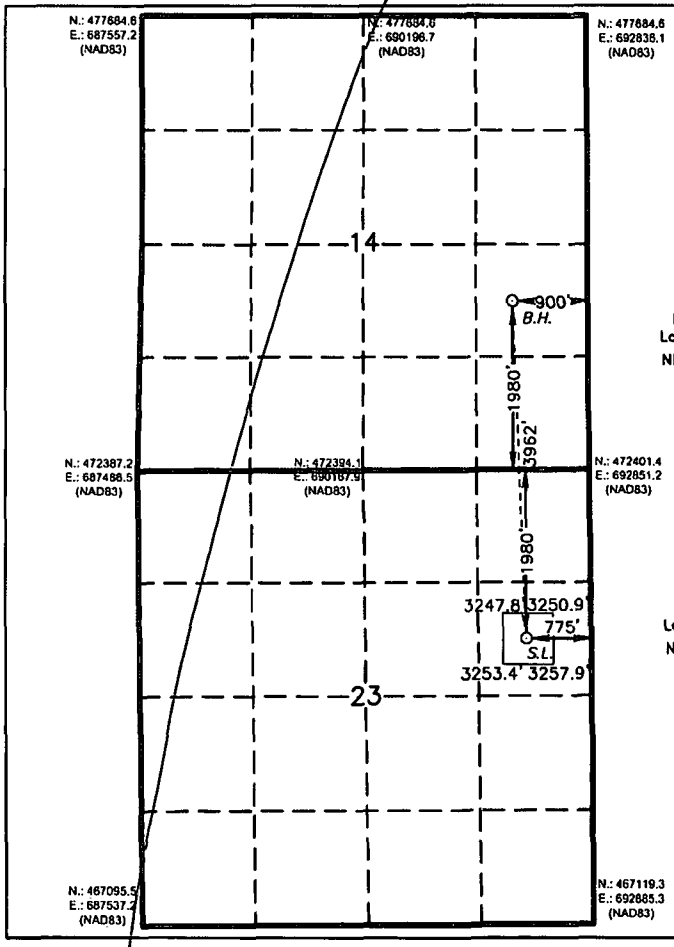
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
H	23	23 S	30 E		1980	NORTH	775	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
I	14	23 S	30 E		1980	SOUTH	900	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	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



PROPOSED BOTTOM HOLE LOCATION
Lat – N 32°18'11.53"
Long – W 103°50'45.19"
NMSPCE– N 474378.5
E 691945.0
(NAD-83)

SURFACE LOCATION
Lat – N 32°17'32.35"
Long – W 103°50'43.71"
NMSPCE– N 470419.7
E 692089.6
(NAD-83)

OPERATOR CERTIFICATION

I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Printed Name

Email Address

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.

April 29, 2014
Date Surveyed

Signature & Seal of Professional Surveyor

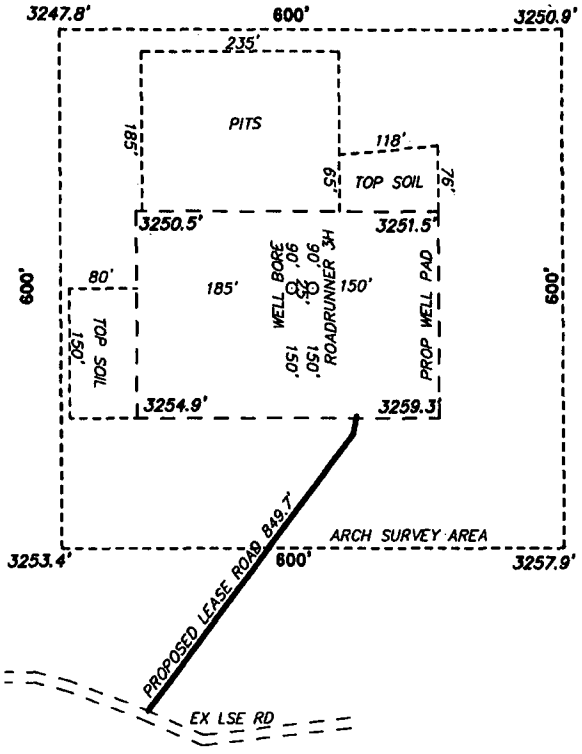
NEW MEXICO 7977 PROFESSIONAL SURVEYOR

Certificate No. Gary L. Jones 7977

0' 1000' 2000' 3000' 4000'
SCALE: 1" = 2000'
WO Num.: 30281

SECTION 23, TOWNSHIP 23 SOUTH, RANGE 30 EAST, N.M.P.M.,

EDDY COUNTY, **NEW MEXICO.**



STRATA PRODUCTION CO.
ROADRUNNER FEDERAL #4H
ELEV. - 3254'
Lat - N 32°17'32.35"
Long - W 103°50'43.71"
NMSPCE- N 470419.7
E 692089.6
(NAD-83)

LOVING, NM IS ±14 MILES TO THE WEST OF LOCATION.

200 0 200 400 FEET

SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF HWY 128 AND MOBLEY, GO SOUTH ON MOBLEY FOR 0.5 MILES TO LEASE ROAD, GO SOUTHEASTERLY 2.5 MILES, EAST 0.8 MILES TO PROPOSED LEASE ROAD.

STRATA PRODUCTION CO.

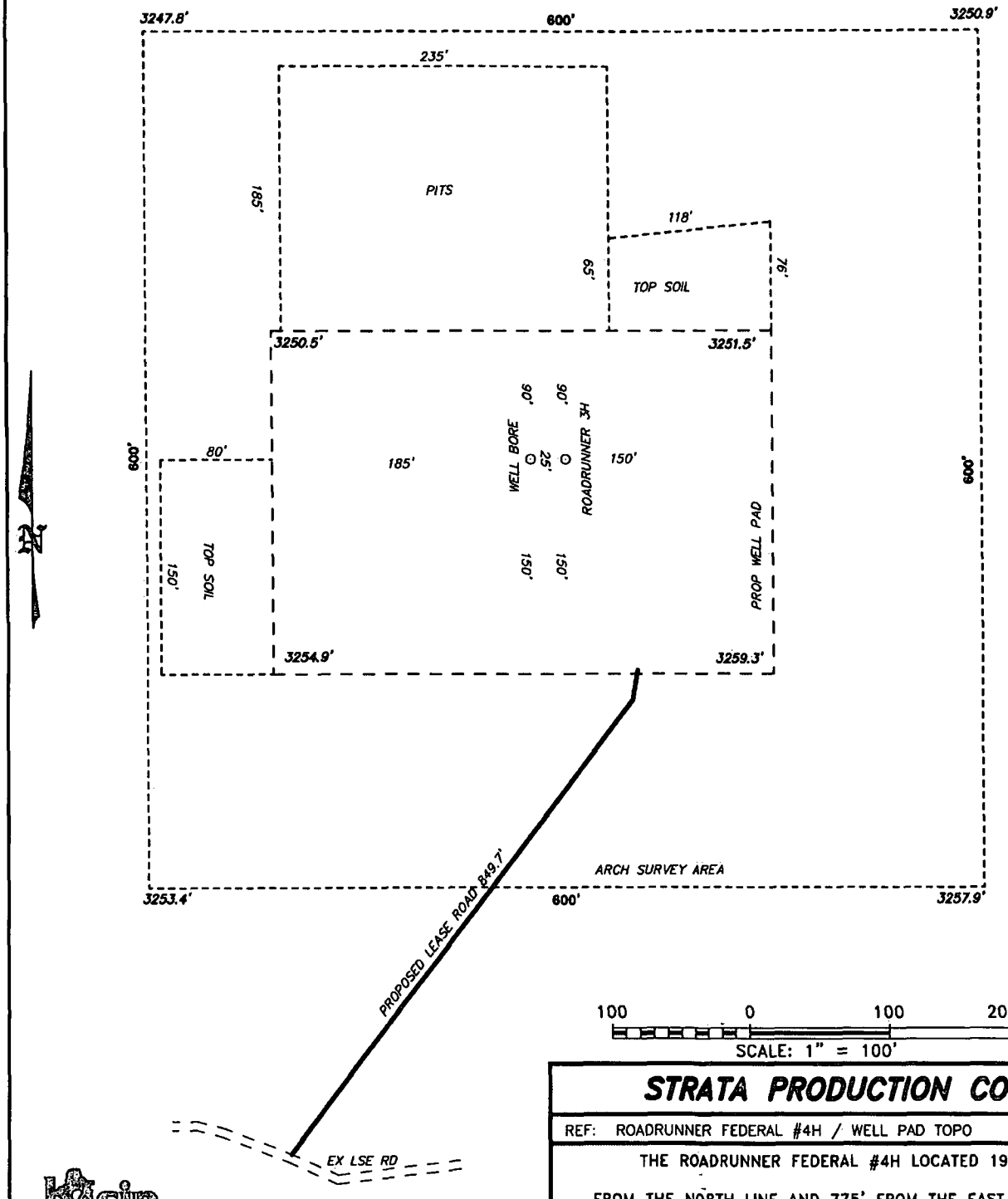
REF: ROADRUNNER FEDERAL #4H / WELL PAD TOPO

THE ROADRUNNER FEDERAL #4H LOCATED 1980' FROM THE NORTH LINE AND 775' FROM THE EAST LINE OF SECTION 23, TOWNSHIP 23 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Basin Surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: 30281	Drawn By: K. NORRIS	Date: 04-30-2014	Survey Date: 04-29-2014	Sheet 1 of 1 Sheets

SECTION 23, TOWNSHIP 23 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



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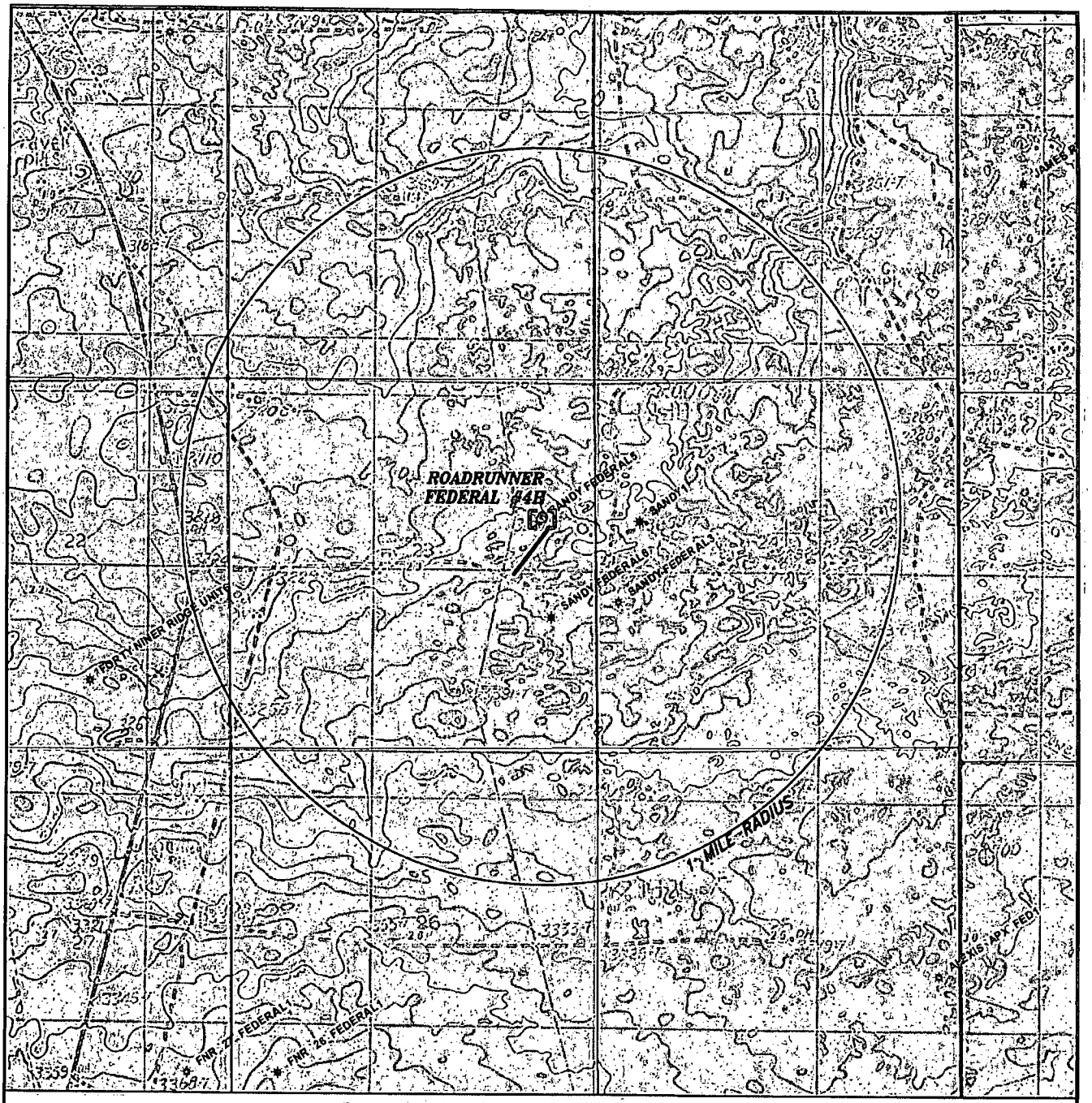

ROADRUNNER FEDERAL #4H

Located 1980' FNL and 775' FEL
Section 23, Township 23 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

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0' 1000' 2000' 3000' 4000'
SCALE: 1" = 2000'

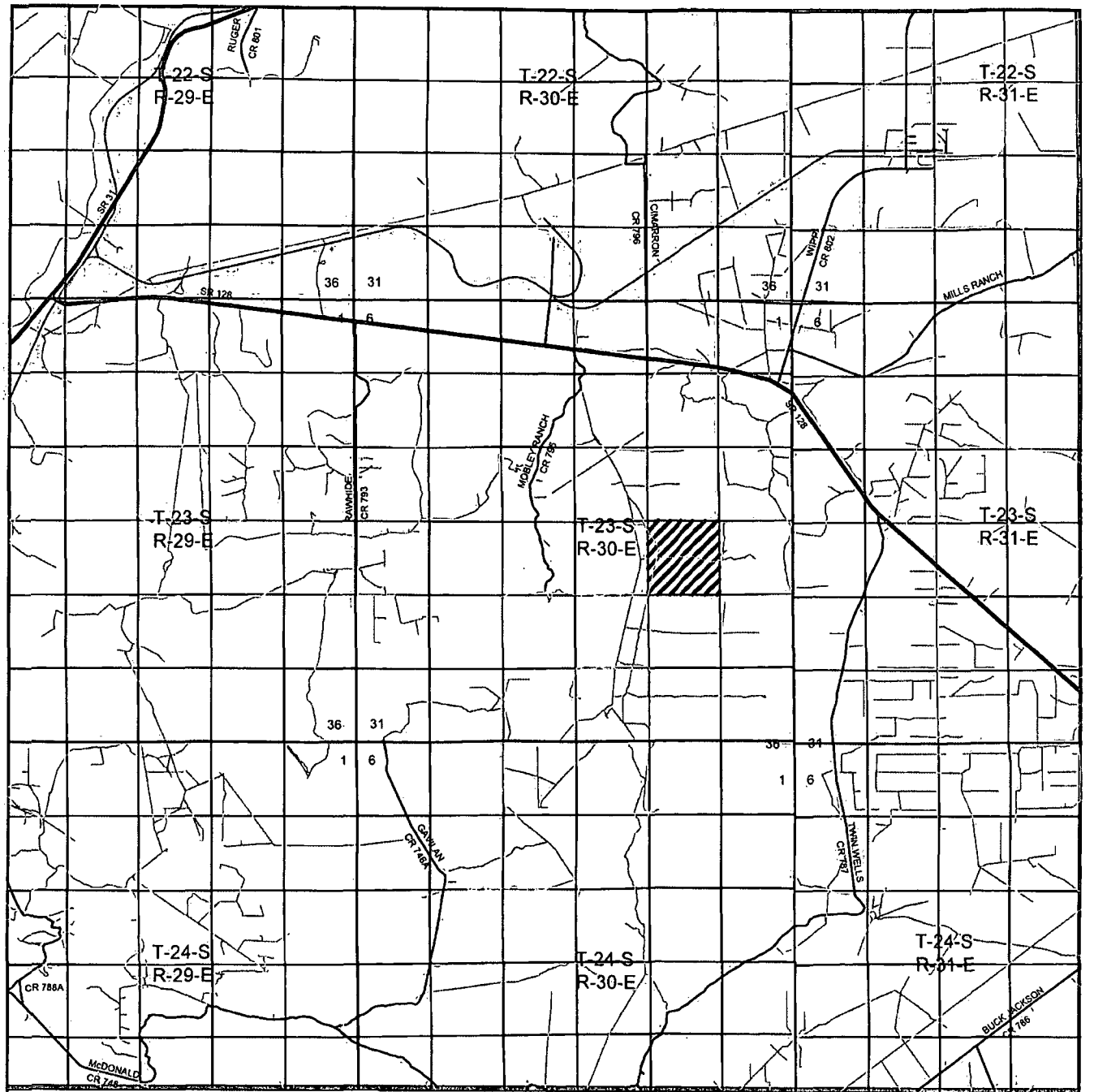
W.O. Number: KAN 30281

Survey Date: 04-29-2014

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

N

STRATA PRODUCTION CO.



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Located 1980' FNL and 775' FEL
Section 23, Township 23 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

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0 1 MI 2 MI 3 MI 4 MI
SCALE: 1" = 2 MILES

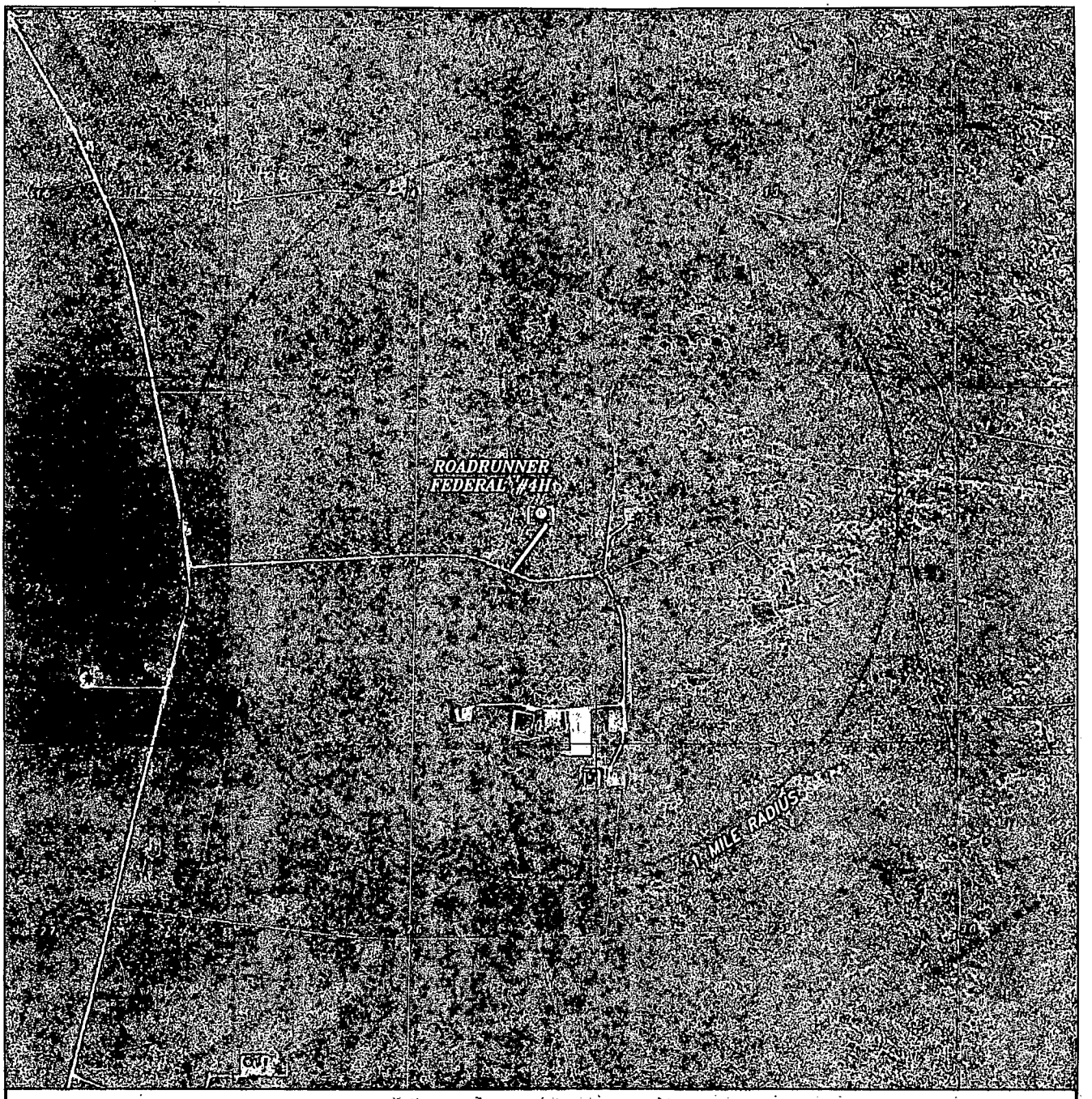
W.O. Number: KAN 30281

Survey Date: 04-29-2014

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

N

STRATA PRODUCTION CO.



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Section 23, Township 23 South, Range 30 East,
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0' 1000' 2000' 3000' 4000'
SCALE: 1" = 2000'

W.O. Number: KAN 30281

Survey Date: 04-29-2014

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

N

STRATA PRODUCTION CO.

REVISED 09/13/~~13~~14

HOLE PROGNOSIS
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
STRATA PRODUCTION COMPANY
ROADRUNNER FEDERAL COM #4H
1980' FNL & 775' FEL
SECTION 23-23S-30E
EDDY COUNTY, NEW MEXICO

In conjunction with Form 3160-3, Application for Permit to Drill, Deepen, or Plug Back, Strata Production Company submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops:

	TVD	MD
Rustler	150'	150'
Top of Salt	470'	470'
Base of Salt	3659'	3659'
Delaware	3868'	3868'
KOP - curve	7150'	7150'
EOC	7610'	7909'
TD	7515'	12057'
Bone Spring	7738'	

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas & Drilling Plan:

Surface	150'	Fresh Water
Delaware	3900' - TD	Oil or Gas

No other formations are expected to produce oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at ~450' and circulating cement back to surface. Potash will be protected by setting 9 5/8" casing at ~~~3900'~~ 3800' and circulating cement back to surface. A 8 3/4" hole will be drilled from the 9 5/8" casing shoe to the kick off point at 7187' and then curved to a target depth of 7665' in the Lower Brushy Canyon. The well will be drilled horizontally until TD is reached. A production string of 5 ½" casing will be run to TD and cemented back to surface.

4. Casing Program:

See COA

Hole Size	Depth	OD Csg	Weight, Grade, Collars, New/Used
17 1/2"	450'	13 3/8"	48#, H-40, STC, New
12 1/4"	3800' ~~3900'~~	9 5/8"	40#, J-55, STC, New
8 3/4"	12140'	5 1/2"	20#, HCP-110, BTC, New

On the 5 1/2" casing BTC will be run from surface to TD.
Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 1.8

Cementing Program:

Surface Casing:
13 3/8" casing will be set at ~450' and cemented with 450 sacks Class C with 2% CaCl2, 14.8 lb/gal, 1.34 cu.ft. yield, 6.34 gal/sk H2O. Calculated with 100% excess. Cement in sufficient quantity to circulate to surface will be utilized.

Intermediate Casing: 9 5/8" casing will be set at ~~3900'~~ 3800' and cemented with 1100 sacks EconoCem HLC Cement with 5% Salt, 5 lb/bbl Kol-Seal plus 0.3% HR-800,12.9 lb/gal, 1.88 cu.ft yield, 10.58 gal/sk H2O. 250 sacks tail of Class C Cement 14.8 lb/gal, 1.33 yield, 6.32 gal/sk H2P. Calculated with 100% excess. Cement in sufficient quantity to circulate to surface will be utilized.

See COA

Production Casing:
It is proposed that 5 1/2" casing will be run from the surface to the total depth of the well at 12,057' with a DV tool at 5500'. The first stage of cement will consist of 1500 sx of 50/50 Poz H with 5% salt, 2% bentonite extender, .7% fluid loss control, .2% TIC dispersant, .1% anti settling agent, .4% antifoam agent and .3% retarder mixed at 14.4 ppg, 1.3 cuft/sk and 5.718 gal/sk.
The second stage will be 800 sx 50/50 PozC with 5% salt, 10% bentonite extender, .4% anti settling agent, 3 lb/sk Kolseal, .125 lb/sk cellophane flakes and .4 lb/sk antifoam agent mixed at 11.9 lb/gal, 2.47 cuft/sk and 13.810 gal/sk. Tail in cement is 100 sx of Class C mixed at 14.8 lb/gal, 1.32 cuft/sk and 6.3 gal/sk.
Cement volumes are calculated with 50% excess in the open hole and 10% excess in the cased annulus. Cement volumes are sufficient to circulate cement to the surface but will be recalculated using a fluid caliper.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit "A" will consist of a TWO ram type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOP's will be nippled up on the 13 3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 3000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 psi and the hydril to 70% of rated working pressure (2100 psi). Low pressure tests at 250 psi will be conducted prior to the high pressure test.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

SEE COA

6. Proposed Mud System: 0-450' - fresh water with native mud sweeps, 8.4-8.9 lb/gal, LCM as needed
450'-~~3900'~~ 3200' brine water 10.0 lb/gal with LCM and gel sweeps
3900'-7200' Cut brine 8.9-9.2 lb/gal with LCM and gel sweeps
7200'-12140' Cut brine 8.9-9.2 lb/gal with sliders and gel sweeps
Sufficient mud materials to maintain weight, viscosity and combat lost circulation will be kept on location.
Mud Monitoring Equipment shall include equipment to monitor the circulation system which shall include but not be limited to daily records of pump speeds, visual mud monitoring equipment to detect volume changes such as pit volumes, electronic/mechanical monitoring equipment for pit volume totalizers, stroke counters and flow sensors. Daily mud tests to determine, as applicable, density, viscosity, gel strength, filtration and pH shall be conducted. Gas detecting equipment will be utilized below the intermediate casing. Gas flare lines and mud-gas separators will be utilized as necessary.

7. Auxiliary Well Control and Monitoring Equipment:

A. A kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe 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 4 ½" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.**

See COA

8. Testing, Logging and Coring Program:

Two man mudlogging unit from 9 5/8" intermediate casing to TD and DLL-MSFL, CNL-Density, Gamma Ray, Caliper.

Mudlogging unit will be employed from approximately 3900' to TD. The Dual Laterolog will be run from TD back to the intermediate casing and the Compensated Neutron/Density and Gamma Ray logs will be run from TD back to surface. In some cases, Strata elects to run rotary sidewall cores from selected intervals dependent upon logging results.

9. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. BHT should not exceed 150 F and BHP should not exceed 3500 psi.

Loss of circulation is possible in the Delaware section of the hole, however, no major loss circulation zones have been reported in offsetting wells. Strata has drilled and completed eighteen (18) wells in the immediate area. To date, Hydrogen Sulfide has not been encountered. However, if Hydrogen Sulfide is encountered, a Hydrogen Sulfide alarm on the drilling rig would be activated. All personnel have had Hydrogen Sulfide training and appropriate breathing apparatus is located on site. If necessary, the well can be shut in utilizing the blowout preventer and other equipment to prevent the migration of Hydrogen Sulfide to the surface.

See COA

10. Anticipated Starting Date and Duration of Operations:

Work will not begin until approval has been received from the BLM. The anticipated spud date is February 1, 2015. Once commenced, the drilling operation should be finished in approximately 30 days. If the well is productive, an additional 15 days will be required for completion and testing before a decision is made to install permanent facilities.

11. Proposed Completion and Fracturing Operations

Once the well has been drilled and casing is cemented, the well will be completed **in the vertical and the horizontal lateral** using the "plug and perf" method where perforations will be placed at defined intervals and each interval will be fracture stimulated. It is anticipated that this well will have 8 intervals and each interval will be fractured with 5000 bbls of gelled fresh water carrying 200,000 lbs of 16-30 resin coated sand.
Prior to the frac job, a Cement Bond Log/ Gamma Ray may be run to determine cement competency.
Flowback of the frac water will either be treated and reused or will be sent to deep underground injection.

MD	INC	AZM	TVDSS	TVD	Northing	Easting	Northing	Easting	V Sect	DLS
0.00	0.00	0.00	-3271.00	0.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
100.00	0.00	0.00	-3171.00	100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
200.00	0.00	0.00	-3071.00	200.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
300.00	0.00	0.00	-2971.00	300.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
400.00	0.00	0.00	-2871.00	400.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
500.00	0.00	0.00	-2771.00	500.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
600.00	0.00	0.00	-2671.00	600.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
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800.00	0.00	0.00	-2471.00	800.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
900.00	0.00	0.00	-2371.00	900.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1000.00	0.00	0.00	-2271.00	1000.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1100.00	0.00	0.00	-2171.00	1100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1200.00	0.00	0.00	-2071.00	1200.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1300.00	0.00	0.00	-1971.00	1300.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1400.00	0.00	0.00	-1871.00	1400.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1500.00	0.00	0.00	-1771.00	1500.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1600.00	0.00	0.00	-1671.00	1600.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1700.00	0.00	0.00	-1571.00	1700.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1800.00	0.00	0.00	-1471.00	1800.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
1900.00	0.00	0.00	-1371.00	1900.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2000.00	0.00	0.00	-1271.00	2000.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2100.00	0.00	0.00	-1171.00	2100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2200.00	0.00	0.00	-1071.00	2200.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2300.00	0.00	0.00	-971.00	2300.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2400.00	0.00	0.00	-871.00	2400.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2500.00	0.00	0.00	-771.00	2500.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2600.00	0.00	0.00	-671.00	2600.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2700.00	0.00	0.00	-571.00	2700.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2800.00	0.00	0.00	-471.00	2800.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
2900.00	0.00	0.00	-371.00	2900.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3000.00	0.00	0.00	-271.00	3000.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3100.00	0.00	0.00	-171.00	3100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3200.00	0.00	0.00	-71.00	3200.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3300.00	0.00	0.00	29.00	3300.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3400.00	0.00	0.00	129.00	3400.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3500.00	0.00	0.00	229.00	3500.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3600.00	0.00	0.00	329.00	3600.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3700.00	0.00	0.00	429.00	3700.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3800.00	0.00	0.00	529.00	3800.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
3900.00	0.00	0.00	629.00	3900.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4000.00	0.00	0.00	729.00	4000.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4100.00	0.00	0.00	829.00	4100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4200.00	0.00	0.00	929.00	4200.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00

4300.00	0.00	0.00	1029.00	4300.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4400.00	0.00	0.00	1129.00	4400.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4500.00	0.00	0.00	1229.00	4500.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4600.00	0.00	0.00	1329.00	4600.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4700.00	0.00	0.00	1429.00	4700.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4800.00	0.00	0.00	1529.00	4800.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
4900.00	0.00	0.00	1629.00	4900.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5000.00	0.00	0.00	1729.00	5000.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5100.00	0.00	0.00	1829.00	5100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5200.00	0.00	0.00	1929.00	5200.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5300.00	0.00	0.00	2029.00	5300.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5400.00	0.00	0.00	2129.00	5400.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5500.00	0.00	0.00	2229.00	5500.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5600.00	0.00	0.00	2329.00	5600.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5700.00	0.00	0.00	2429.00	5700.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5800.00	0.00	0.00	2529.00	5800.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
5900.00	0.00	0.00	2629.00	5900.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6000.00	0.00	0.00	2729.00	6000.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6100.00	0.00	0.00	2829.00	6100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6200.00	0.00	0.00	2929.00	6200.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6300.00	0.00	0.00	3029.00	6300.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6400.00	0.00	0.00	3129.00	6400.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6500.00	0.00	0.00	3229.00	6500.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6600.00	0.00	0.00	3329.00	6600.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6700.00	0.00	0.00	3429.00	6700.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6800.00	0.00	0.00	3529.00	6800.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
6900.00	0.00	0.00	3629.00	6900.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
7000.00	0.00	0.00	3729.00	7000.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
7100.00	0.00	0.00	3829.00	7100.00	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
7133.90	0.00	0.00	3862.90	7133.90	0.00 N	0.00 E	470360.20 N	650906.30 E	0.00	0.00
7150.00	1.93	354.45	3879.00	7150.00	0.27 N	0.03 W	470360.47 N	650906.27 E	0.26	####
7175.00	4.93	354.45	3903.95	7174.95	1.76 N	0.17 W	470361.96 N	650906.13 E	1.71	####
7200.00	7.93	354.45	3928.79	7199.79	4.55 N	0.44 W	470364.75 N	650905.86 E	4.42	####
7225.00	10.93	354.45	3953.45	7224.45	8.62 N	0.84 W	470368.82 N	650905.46 E	8.39	####
7250.00	13.93	354.45	3977.86	7248.86	13.98 N	1.36 W	470374.18 N	650904.94 E	13.60	####
7275.00	16.93	354.45	4001.96	7272.96	20.60 N	2.00 W	470380.80 N	650904.30 E	20.05	####
7300.00	19.93	354.45	4025.67	7296.67	28.47 N	2.77 W	470388.67 N	650903.53 E	27.70	####
7325.00	22.93	354.45	4048.94	7319.94	37.56 N	3.65 W	470397.76 N	650902.65 E	36.55	####
7350.00	25.93	354.45	4071.70	7342.70	47.85 N	4.65 W	470408.05 N	650901.65 E	46.56	####
7375.00	28.93	354.45	4093.88	7364.88	59.31 N	5.77 W	470419.51 N	650900.53 E	57.72	####
7400.00	31.93	354.45	4115.44	7386.44	71.91 N	6.99 W	470432.11 N	650899.31 E	69.98	####
7425.00	34.93	354.45	4136.30	7407.30	85.62 N	8.32 W	470445.82 N	650897.98 E	83.32	####
7450.00	37.93	354.45	4156.41	7427.41	100.40 N	9.76 W	470460.60 N	650896.54 E	97.70	####
7475.00	40.93	354.45	4175.72	7446.72	116.20 N	11.30 W	470476.40 N	650895.00 E	113.08	####

7500.00	43.93	354.45	4194.17	7465.17	132.99 N	12.93 W	470493.19 N	650893.37 E	129.41	####
7525.00	46.93	354.45	4211.71	7482.71	150.71 N	14.65 W	470510.91 N	650891.65 E	146.66	####
7550.00	49.93	354.45	4228.29	7499.29	169.32 N	16.46 W	470529.52 N	650889.84 E	164.78	####
7575.00	52.93	354.45	4243.88	7514.88	188.78 N	18.35 W	470548.98 N	650887.95 E	183.71	####
7600.00	55.93	354.45	4258.42	7529.42	209.02 N	20.32 W	470569.22 N	650885.98 E	203.40	####
7625.00	58.93	354.45	4271.88	7542.88	229.98 N	22.36 W	470590.18 N	650883.94 E	223.81	####
7650.00	61.93	354.45	4284.21	7555.21	251.62 N	24.46 W	470611.82 N	650881.84 E	244.86	####
7675.00	64.93	354.45	4295.39	7566.39	273.88 N	26.62 W	470634.08 N	650879.68 E	266.52	####
7700.00	67.93	354.45	4305.39	7576.39	296.68 N	28.84 W	470656.88 N	650877.46 E	288.71	####
7725.00	70.93	354.45	4314.17	7585.17	319.97 N	31.10 W	470680.17 N	650875.20 E	311.38	####
7750.00	73.93	354.45	4321.71	7592.71	343.69 N	33.41 W	470703.89 N	650872.89 E	334.46	####
7775.00	76.93	354.45	4328.00	7599.00	367.77 N	35.75 W	470727.97 N	650870.55 E	357.90	####
7800.00	79.93	354.45	4333.01	7604.01	392.15 N	38.12 W	470752.35 N	650868.18 E	381.62	####
7825.00	82.93	354.45	4336.74	7607.74	416.75 N	40.51 W	470776.95 N	650865.79 E	405.56	####
7850.00	85.93	354.45	4339.16	7610.16	441.51 N	42.92 W	470801.71 N	650863.38 E	429.65	####
7875.00	88.93	354.45	4340.28	7611.28	466.37 N	45.34 W	470826.57 N	650860.96 E	453.84	####
7900.00	91.93	354.45	4340.09	7611.09	491.25 N	47.75 W	470851.45 N	650858.55 E	478.05	####
7909.02	93.01	354.45	4339.70	7610.70	500.21 N	48.63 W	470860.41 N	650857.67 E	486.78	####
8000.00	93.01	354.45	4334.92	7605.92	590.64 N	57.42 W	470950.84 N	650848.88 E	574.78	0.00
8100.00	93.01	354.45	4329.66	7600.66	690.04 N	67.08 W	471050.24 N	650839.22 E	671.50	0.00
8200.00	93.01	354.45	4324.40	7595.40	789.43 N	76.74 W	471149.63 N	650829.56 E	768.23	0.00
8300.00	93.01	354.45	4319.15	7590.15	888.82 N	86.40 W	471249.02 N	650819.90 E	864.95	0.00
8400.00	93.01	354.45	4313.89	7584.89	988.22 N	96.06 W	471348.42 N	650810.24 E	961.68	0.00
8416.91	93.01	354.45	4313.00	7584.00	1005.02 N	97.70 W	471365.22 N	650808.60 E	978.03	0.00
8500.00	91.35	354.46	4309.83	7580.83	1087.66 N	105.72 W	471447.86 N	650800.58 E	1058.45	2.00
8575.66	89.84	354.47	4309.05	7580.05	1162.97 N	113.02 W	471523.17 N	650793.28 E	1131.72	2.00
8600.00	89.84	354.47	4309.12	7580.12	1187.19 N	115.37 W	471547.39 N	650790.93 E	1155.29	0.00
8700.00	89.84	354.47	4309.40	7580.40	1286.72 N	125.01 W	471646.92 N	650781.30 E	1252.14	0.00
8800.00	89.84	354.47	4309.68	7580.68	1386.26 N	134.64 W	471746.46 N	650771.66 E	1348.99	0.00
8900.00	89.84	354.47	4309.96	7580.96	1485.79 N	144.28 W	471845.99 N	650762.02 E	1445.83	0.00
8914.03	89.84	354.47	4310.00	7581.00	1499.75 N	145.63 W	471859.95 N	650760.67 E	1459.42	0.00
9000.00	90.21	351.92	4309.96	7580.96	1585.11 N	155.82 W	471945.31 N	650750.48 E	1543.13	3.00
9100.00	90.65	348.95	4309.20	7580.20	1683.71 N	172.44 W	472043.91 N	650733.86 E	1641.48	3.00
9200.00	91.09	345.98	4307.69	7578.69	1781.30 N	194.14 W	472141.50 N	650712.16 E	1740.62	3.00
9300.00	91.52	343.01	4305.42	7576.42	1877.63 N	220.86 W	472237.83 N	650685.44 E	1840.28	3.00
9400.00	91.94	340.04	4302.40	7573.40	1972.42 N	252.53 W	472332.62 N	650653.77 E	1940.19	3.00
9500.00	92.37	337.07	4298.64	7569.64	2065.42 N	289.06 W	472425.62 N	650617.24 E	2040.07	3.00
9600.00	92.78	334.09	4294.14	7565.14	2156.37 N	330.35 W	472516.57 N	650575.95 E	2139.66	3.00
9628.76	92.90	333.24	4292.72	7563.72	2182.12 N	343.10 W	472542.32 N	650563.20 E	2168.21	3.00
9700.00	92.90	333.24	4289.11	7560.11	2245.64 N	375.13 W	472605.84 N	650531.17 E	2238.85	0.00
9761.52	92.90	333.24	4286.00	7557.00	2300.50 N	402.80 W	472660.70 N	650503.50 E	2299.86	0.00
9800.00	92.51	332.58	4284.19	7555.19	2334.72 N	420.30 W	472694.92 N	650486.00 E	2338.00	2.00
9900.00	91.48	330.86	4280.71	7551.71	2422.73 N	467.65 W	472782.93 N	650438.65 E	2436.88	2.00
10000.00	90.44	329.15	4279.04	7550.04	2509.32 N	517.63 W	472869.52 N	650388.67 E	2535.33	2.00

10024.76	90.19	328.72	4278.90	7549.90	2530.53 N	530.41 W	472890.73 N	650375.89 E	2559.63	2.00
10100.00	90.19	328.72	4278.65	7549.65	2594.83 N	569.47 W	472955.03 N	650336.83 E	2633.40	0.00
10200.00	90.19	328.72	4278.32	7549.32	2680.30 N	621.39 W	473040.50 N	650284.91 E	2731.45	0.00
10297.99	90.19	328.72	4278.00	7549.00	2764.05 N	672.26 W	473124.25 N	650234.04 E	2827.53	0.00
10300.00	90.22	328.75	4277.99	7548.99	2765.77 N	673.31 W	473125.97 N	650232.99 E	2829.51	2.00
10392.28	91.66	329.91	4276.48	7547.48	2845.13 N	720.37 W	473205.33 N	650185.93 E	2920.16	2.00
10400.00	91.66	329.91	4276.26	7547.26	2851.80 N	724.24 W	473212.00 N	650182.06 E	2927.76	0.00
10500.00	91.66	329.91	4273.37	7544.37	2938.29 N	774.35 W	473298.49 N	650131.95 E	3026.15	0.00
10600.00	91.66	329.91	4270.48	7541.48	3024.77 N	824.47 W	473384.98 N	650081.83 E	3124.55	0.00
10700.00	91.66	329.91	4267.60	7538.60	3111.26 N	874.59 W	473471.46 N	650031.72 E	3222.95	0.00
10800.00	91.66	329.91	4264.71	7535.71	3197.75 N	924.70 W	473557.95 N	649981.60 E	3321.35	0.00
10900.00	91.66	329.91	4261.82	7532.82	3284.24 N	974.82 W	473644.44 N	649931.48 E	3419.75	0.00
10997.67	91.66	329.91	4259.00	7530.00	3368.71 N	1023.76 W	473728.91 N	649882.54 E	3515.85	0.00
11000.00	91.61	329.91	4258.93	7529.93	3370.73 N	1024.93 W	473730.93 N	649881.37 E	3518.15	2.00
11058.78	90.44	329.83	4257.89	7528.89	3421.55 N	1054.44 W	473781.75 N	649851.86 E	3575.99	2.00
11100.00	90.44	329.83	4257.57	7528.57	3457.19 N	1075.15 W	473817.39 N	649831.15 E	3616.55	0.00
11200.00	90.44	329.83	4256.81	7527.81	3543.63 N	1125.42 W	473903.83 N	649780.89 E	3714.96	0.00
11300.00	90.44	329.83	4256.05	7527.05	3630.08 N	1175.68 W	473990.28 N	649730.62 E	3813.37	0.00
11400.00	90.44	329.83	4255.29	7526.29	3716.53 N	1225.94 W	474076.73 N	649680.36 E	3911.79	0.00
11500.00	90.44	329.83	4254.53	7525.53	3802.98 N	1276.20 W	474163.18 N	649630.10 E	4010.20	0.00
11569.93	90.44	329.83	4254.00	7525.00	3863.43 N	1311.35 W	474223.63 N	649594.95 E	4079.02	0.00
11608.69	91.21	329.91	4253.45	7524.45	3896.95 N	1330.81 W	474257.15 N	649575.50 E	4117.16	2.00
11700.00	91.21	329.91	4251.52	7522.52	3975.94 N	1376.57 W	474336.14 N	649529.73 E	4207.03	0.00
11800.00	91.21	329.91	4249.42	7520.42	4062.45 N	1426.69 W	474422.65 N	649479.61 E	4305.44	0.00
11900.00	91.21	329.91	4247.32	7518.32	4148.95 N	1476.81 W	474509.15 N	649429.49 E	4403.86	0.00
12000.00	91.21	329.91	4245.21	7516.21	4235.46 N	1526.93 W	474595.66 N	649379.37 E	4502.28	0.00
12057.61	91.21	329.91	4244.00	7515.00	4285.30 N	1555.80 W	474645.50 N	649350.50 E	4558.98	0.00

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Strata Production Company
LEASE NO.:	NMNM-0532769
WELL NAME & NO.:	Roadrunner Federal Com 4H
SURFACE HOLE FOOTAGE:	1980' FNL & 0900' FEL
BOTTOM HOLE FOOTAGE	2310' FSL & 2310' FEL Sec. 14, T. 23 S., R 30 E.
LOCATION:	Section 23, T. 23 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico
API:	30-015-42080

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

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

1. **Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

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 is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out 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 for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

R-111-P-Potash
High Cave/Karst
Possibility of water flows in the Salado and Delaware.
Possibility of lost circulation in the Rustler and Delaware.

1. The **13-3/8** inch surface casing shall be set at approximately **450** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

    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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    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 cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing, which shall be set at approximately **3800** feet, is:

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

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

Operator has proposed DV tool at depth of 5500'. Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage. **Excess calculates to 17% - Additional cement may be required.**

b. Second stage above DV tool:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Excess calculates to negative 16% - Additional cement will be required.**

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.

5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

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 **3000 (3M)** psi.

   a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

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

   a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

   b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock with a corresponding chart (i.e. two hour clock-two hour chart, one hour clock-one hour chart).

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

e. 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.**

f. 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. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 091814