Form 3160-5
(2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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

NM OIL CONS
ARTESIA DISTRICT

JAN 31 2019

RECEIVED

5. Lease Serial No.
NMNM45236

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
Multiple--See Attached

2. Name of Operator
OXY USA INCORPORATED
Contact: SARAH CHAPMAN
E-Mail: SARAH_CHAPMAN@OXY.COM

9. API Well No.
Multiple--See Attached

3a. Address
5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 77046-0521

3b. Phone No. (include area code)
Ph: 713-350-4997

10. Field and Pool or Exploratory Area
INGLE WELLS

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Multiple--See Attached

11. County or Parish, State
EDDY COUNTY, NM

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
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original A PD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 f. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and z 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.

OXY respectfully requests to make the following change:

This is a bulk sundry request for 4 wells in Sterling Silver MDP1 33-4 Fed Com to include a 4 string contingency into our original 3 string design. The wells related to this sundry request are:

Sterling Silver MDP1 33-4 Fed Com 1H (30-015-45335)
Sterling Silver MDP1 33-4 Fed Com 2H (30-015-45390)
Sterling Silver MDP1 33-4 Fed Com 3H (30-015-45391)
Sterling Silver MDP1 33-4 Fed Com 3H (30-015-45392)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

*Oxy requests the option to run the 7.625? Intermediate II as a contingency string to be run only

Accepted For Record
NMOCD
2-4-19

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #447824 verified by the BLM Well Information System
For OXY USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 12/14/2018 (19PP0633SE)

Name *(Printed/Typed)* DAVID STEWART — Title REGULATORY ADVISOR

Signature (Electronic Submission) — Date 12/14/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE — Title PETROLEUM ENGINEER — Date 01/22/2019

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

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)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

RJP 2-19-19

Additional data for EC transaction #447824 that would not fit on the form

Wells/Facilities, continued

Agreement	Lease	Well/Fac Name, Number	API Number	Location
NMNM45236	NMNM45236	STERLING SILVER MDP1 33-4 FD3D-2H	15-45390-00-X1	Sec 33 T23S R31E NWNW 90FNL 939FWL 32.267933 N Lat, 103.788254 W Lon
NMNM45236	NMNM45236	STERLING SILVER MDP1 33-4 FD3D-3H	15-45391-00-X1	Sec 33 T23S R31E NENW 69FNL 2369FWL 32.267994 N Lat, 103.783623 W Lon
NMNM45236	NMNM45236	STERLING SILVER MDP1 33-4 FD3D-4H	15-45392-00-X1	Sec 33 T23S R31E NENW 69FNL 2474FWL 32.267994 N Lat, 103.783287 W Lon
NMNM45236	NMNM45236	STERLING SILVER MDP1 33-4 FD3D-1H	15-45335-00-X1	Sec 33 T23S R31E NWNW 90FNL 834FWL 32.267933 N Lat, 103.788589 W Lon

32. Additional remarks, continued

if severe hole conditions dictate an additional casing string necessary.
*Oxy requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower.
*Oxy requests the option to run production casing with DQX and/or SF TORQ connections to accommodate hole conditions or drilling operations.

Please see attached updated drill plan and specs for more information.

Thank you.

Oxy USA Inc. - Sterling Silver MDP1 33-4 Fed Com 1H, 2H, 3H & 4H Amended Drill Plan

1. Bulk Sundry Details

This is a bulk sundry request for 4 wells in Sterling Silver MDP1 33-4 Fed Com to include a 4 string contingency into our original 3 string design. The wells related to this sundry request are:

Well Name	API	Lease Number
Sterling Silver MDP1 33-4 Fed Com 1H	30-015-45335	NMNM45236
Sterling Silver MDP1 33-4 Fed Com 2H	30-015-45390	NMNM45236
Sterling Silver MDP1 33-4 Fed Com 3H	30-015-45391	NMNM45236
Sterling Silver MDP1 33-4 Fed Com 4H	30-015-45392	NMNM45236

2. Casing Program

Primary Plan:

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant Body SF Tension	Buoyant Joint SF Tension
	From (ft)	To (ft)								
17.5	0	474	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4246	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	20097	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Values will meet or Exceed			

Contingency Plan:

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant Body SF Tension	Buoyant Joint SF Tension
	From (ft)	To (ft)								
17.5	0	474	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4246	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	9326	7.625	26.4	L-80 HC	SF (0 ft to 4000 ft) FJ (4000 ft to 9326 ft)	1.125	1.2	1.4	1.4
6.75	0	20097	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Values will meet or Exceed			

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h
*Oxy requests the option to run the 7.625" Intermediate II as a contingency string to be run only if severe hole conditions dictate an additional casing string necessary.
*Oxy requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower.
*Oxy requests the option to run production casing with DQX and/or SF TORQ connections to accommodate hole conditions or drilling operations.

3. Cementing Program

Primary plan:

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	507	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	988	12.9	1.73	8.784	15:26	Pozzolan Cement, Retarder
Intermediate (Tail)	155	14.8	1.33	6.368	7:11	Class C Cement, Accelerator
Production 1st Stage (Lead)	284	13.2	1.38	6.692	17:50	Class H Cement, Retarder, Dispersant, Salt
Production 1st Stage (Tail)	2113	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt
2nd Stage Production Lead Slurry to be pumped as Bradenhead Squeeze from surface, down the Production annulus.						
Production 2nd Stage (Tail)	903	12.9	1.872	10.11	21:54	Class C Cement, Accelerator

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	474	100%
Intermediate (Lead)	0	3746	50%
Intermediate (Tail)	3746	4246	20%
Production 1st Stage (Lead)	6393	8019	5%
Production 1st Stage (Tail)	8019	20097	5%
Production 2nd Stage (Tail)	0	6393	25%

Contingency plan:

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	507	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	910	12.9	1.88	10.130	14:22	Pozzolan Cement, Retarder
Intermediate (Tail)	155	14.8	1.33	6.370	12:45	Class C Cement, Accelerator
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	65	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II 2nd Stage (Tail Slurry) to be pumped as Bradenhead Squeeze from surface, down the Intermediate annulus						
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	419	12.9	1.92	10.410	23:10	Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Production (Tail)	827	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	474	100%
Intermediate (Lead)	0	3746	50%
Intermediate (Tail)	3746	4246	20%
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	8019	9326	5%
Intermediate II 2nd Stage	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	0	8019	25%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	8826	20097	20%

4. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	474	Water-Based Mud	8.6-8.8	40-60	N/C
474	4246	Saturated Brine-Based Mud	9.8-10.0	35-45	N/C
4246	9326	Water-Based or Oil-Based Mud	8.0-9.6	38-50	N/C
9326	20097	Water-Based or Oil-Based Mud	8.0-9.6	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

5. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4976 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	160°F

Attachments

_x__ Premium Connection Specs

6. Company Personnel

Name	Title	Office Phone	Mobile Phone
Edgar Diaz-Aguirre	Drilling Engineer	713-552-8594	713-550-2699
Diego Tellez	Drilling Engineer Supervisor	713-350-4602	713-303-4932
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
John Willis	Drilling Manager	713-366-5556	713-259-1417

PERFORMANCE DATA

TMK UP SF TORQ™ **5.500 in** **20.00 lbs/ft** **P110 HC**

Technical Data Sheet

Tubular Parameters

Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P110 HC		Yield Load	641.000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	728,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,640	psi
Nominal ID	4.778	in	Collapse Pressure	12.780	psi
Drift Diameter	4.653	in			
Nom Pipe Body Area	5.828	in²			

Connection Parameters

Connection OD	5.777	in
Connection ID	4.734	in
Make-Up Loss	5.823	in
Critical Section Area	5.875	in²
Tension Efficiency	90.0	%
Compression Efficiency	90.0	%
Yield Load In Tension	576,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	12.780	psi
Uniaxial Bending	83	°/ 100 ft

Make-Up Torques

Min. Make-Up Torque	15.700	ft-lbs
Opt. Make-Up Torque	19.600	ft-lbs
Max Make-Up Torque	21,600	ft-lbs
Operating Torque	29 000	ft-lbs
Yield Torque	36,000	ft-lbs

Printed on: February-22-2018

IPSCO

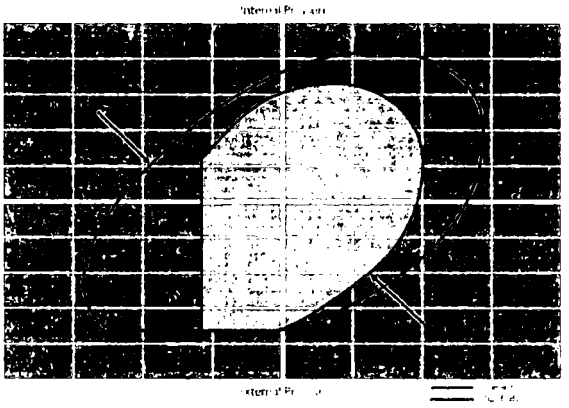
TECHNICAL DATA SHEET TMK UP FJ 7.625 X 26.4 L80 HC

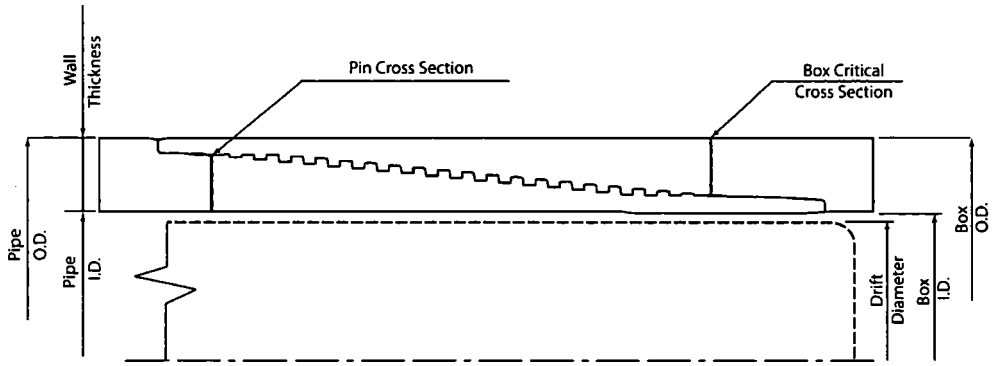
TUBULAR PARAMETERS	
Nominal OD, (inch)	7.625
Wall Thickness, (inch)	0.328
Pipe Grade	L80 HC
Drift	Standard

CONNECTION PARAMETERS	
Connection OD (inch)	7.63
Connection ID, (inch)	6.975
Make-Up Loss, (inch)	4.165
Connection Critical Area, (sq inch)	2.520
Yield Strength in Tension, (klbs)	347
Yeld Strength in Compression, (klbs)	347
Tension Efficiency	58%
Compression Efficiency	58%
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	3 910
Uniaxial Bending (deg/100ft)	28.0

MAKE-UP TORQUES	
Yield Torque, (ft-lb)	22 200
Minimum Make-Up Torque, (ft-lb)	12 500
Optimum Make-Up Torque, (ft-lb)	13 900
Maximum Make-Up Torque, (ft-lb)	15 300

PIPE BODY PROPERTIES	
PE Weight, (lbs/ft)	25.56
Nominal Weight, (lbs/ft)	26.40
Nominal ID, (inch)	6.969
Drift Diameter, (inch)	6.844
Nominal Pipe Body Area, (sq inch)	7.519
Yield Strength in Tension, (klbs)	601
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	3 910





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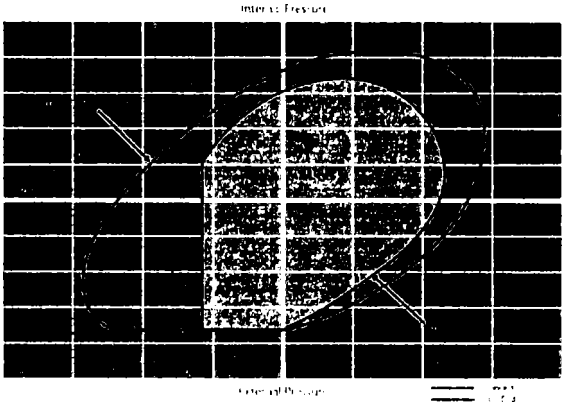
TECHNICAL DATA SHEET TMK UP SF 7.625 X 26.4 L80 HC

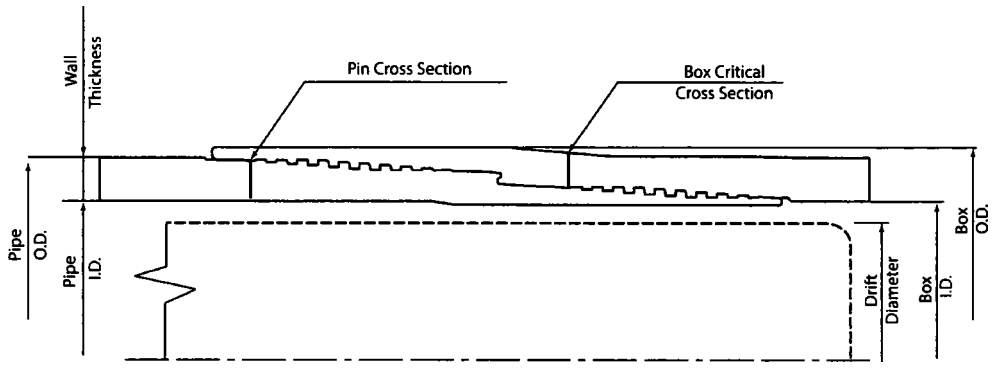
TUBULAR PARAMETERS	
Nominal OD, (inch)	7.625
Wall Thickness, (inch)	0.328
Pipe Grade	L80 HC
Drift	Standard

CONNECTION PARAMETERS	
Connection OD (inch)	7.79
Connection ID, (inch)	6.938
Make-Up Loss, (inch)	6.029
Connection Critical Area, (sq inch)	5.948
Yield Strength in Tension, (klbs)	533
Yeld Strength in Compression, (klbs)	533
Tension Efficiency	89%
Compression Efficiency	89%
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	3 910
Uniaxial Bending (deg/100ft)	42.7

MAKE-UP TORQUES	
Yield Torque, (ft-lb)	22 600
Minimum Make-Up Torque, (ft-lb)	15 000
Optimum Make-Up Torque, (ft-lb)	16 500
Maximum Make-Up Torque, (ft-lb)	18 200

PIPE BODY PROPERTIES	
PE Weight, (lbs/ft)	25.56
Nominal Weight, (lbs/ft)	26.40
Nominal ID, (inch)	6.969
Drift Diameter, (inch)	6.844
Nominal Pipe Body Area, (sq inch)	7.519
Yield Strength in Tension, (klbs)	601
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	3 910





Print date: 07/10/2018 20:00

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INC.
LEASE NO.:	NMNM 045236
WELL NAME & NO.:	Sterling Silver MDP1 33-4 Fed Com 1H
SURFACE HOLE FOOTAGE:	90'/N & 834'/W
BOTTOM HOLE FOOTAGE	180'/S & 440'/W
LOCATION:	SECTION 33, T23S, R31E, NMPM
COUNTY:	EDDY

Potash	○ None	○ Secretary	◉ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

All previous COAs still apply except for the following:

A. CASING

1. The minimum required fill of cement behind the **7 5/8** inch second intermediate casing is:

    - Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**

Operator has proposed to pump down 9 5/8" X 7 5/8" annulus. Operator must run a CBL from the TD of the 7 5/8" casing to surface.

MHH 01222019

GENERAL 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)

☒ Chaves and Roosevelt Counties
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

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

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

A. CASING

1. 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.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. 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.

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