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Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NOV 06 2018

DISTRICT I-ARTESIA O.C.D.

Carlsbad Field Office
OCD Artesia

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

5. Lease Serial No.
NMNM40659

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM138937

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

8. Well Name and No.
IRIDIUM MDP1 28-21 FEDERAL COM 41H

2. Name of Operator
OXY USA INCORPORATED
Contact: DAVID STEWART
E-Mail: david_stewart@oxy.com

9. API Well No.
30-015-45075-00-X1

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

3b. Phone No. (include area code)
Ph: 432.685.5717

10. Field and Pool or Exploratory Area
INGLE WELLS

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 28 T23S R31E SWSW 610FSL 683FWL
32.269855 N Lat, 103.789085 W Lon

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 APD
	☐ 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 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.

GC 11-7-18
Accepted for record - NMOCD

OXY USA Inc. respectfully requests to amend the APD with the following changes.

1. Add an additional 7-5/8" Intermediate II Casing String, see attached for casing and cementing details.

2. Add optional 5-1/2" casing connection, see attached for detail sheet.

3. Amend the mud program, depth and type, see attached.

4. Add the Annular Clearance and BOP Break Testing Variance Requests, see attached.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #441529 verified by the BLM Well Information System
For OXY USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 10/29/2018 (19PP0259SE)

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

Signature (Electronic Submission) — Date 10/29/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE — Title PETROLEUM ENGINEER — Date 10/29/2018

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 ****

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INCORPORATED
LEASE NO.:	NMNM 040659
WELL NAME & NO.:	41H-IRIDIUM MDP1 28-21 FED COM
SURFACE HOLE FOOTAGE:	610'/S & 683'/W
BOTTOM HOLE FOOTAGE	180'/N & 940'/W
LOCATION:	T-23S, R-31E, S-28. NMPM
COUNTY:	EDDY, NM

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

Second intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

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

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

MHH 10292018

GENERAL REQUIREMENTS

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.

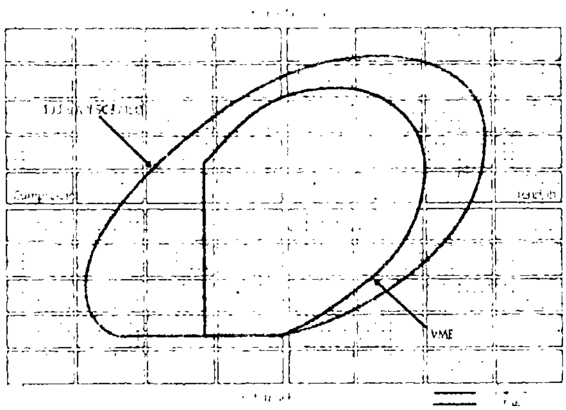
TECHNICAL DATA SHEET TMK UP FJ 7.625 X 26.4 L80 HC

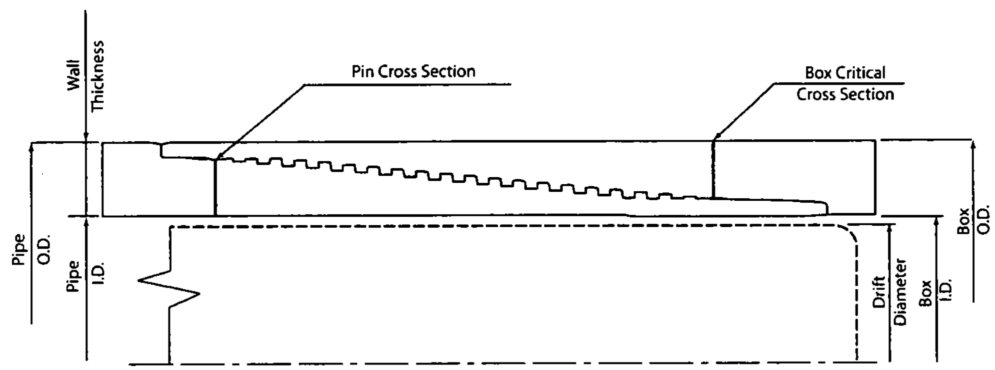
TUBULAR PARAMETERS	
Nominal OD, (inch)	7.625
Wall Thickness, (inch)	0.328
Pipe Grade	L80 HC
Drift	Standard

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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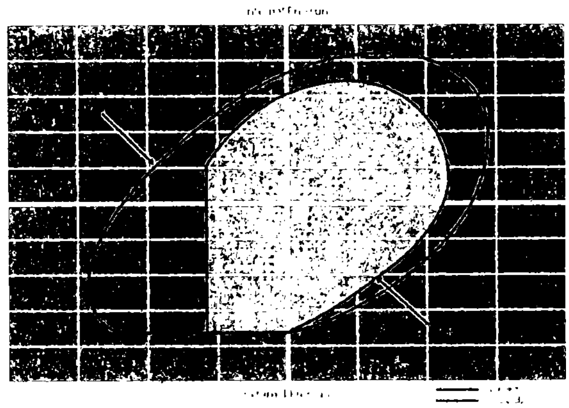
TECHNICAL DATA SHEET TMK UP SF 7.625 X 26.4 L80 HC

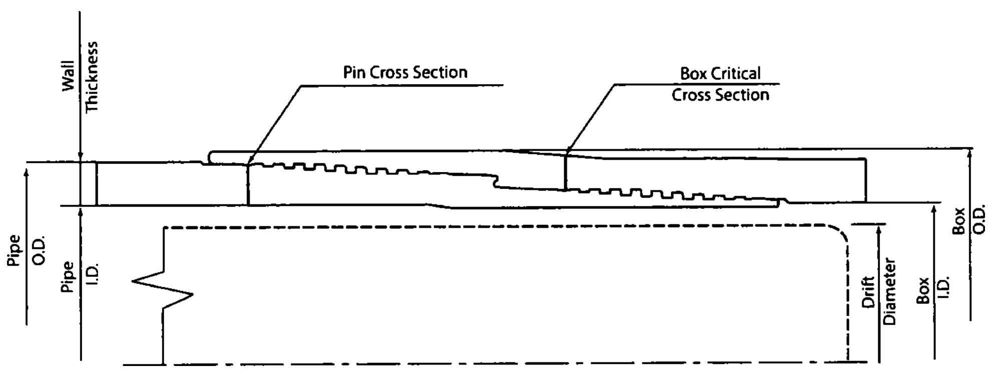
TUBULAR PARAMETERS	
Nominal OD, (inch)	7.625
Wall Thickness, (inch)	0.328
Pipe Grade	L80 HC
Drift	Standard

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

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





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PERFORMANCE DATA

TMK UP DQX | **5.500 in** | **20.00 lbs/ft** | **P-110**

Technical Data Sheet

Tubular Parameters

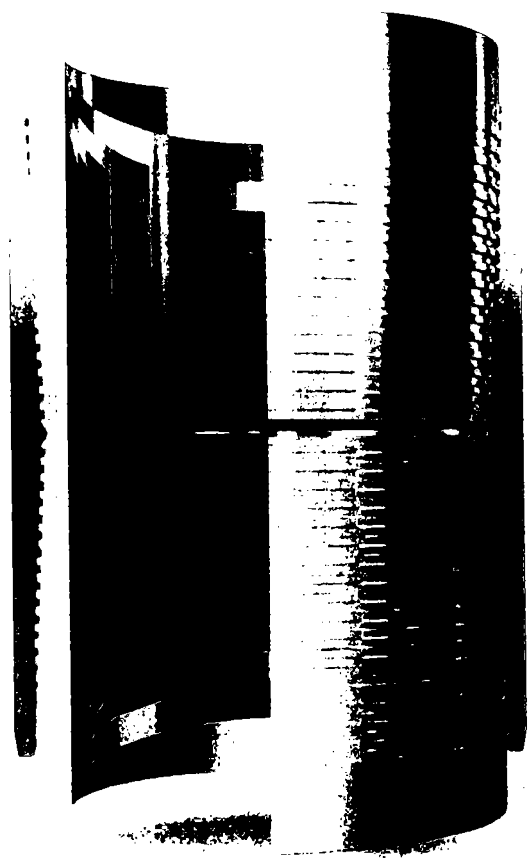
Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P-110		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,600	psi
Nominal ID	4.778	in	Collapse Pressure	11,100	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in²			

Connection Parameters

Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.122	in
Critical Section Area	5.828	in²
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,600	psi
Collapse Pressure	11,100	psi

Make-Up Torques

Min. Make-Up Torque	11,600	ft-lbs
Opt. Make-Up Torque	12,900	ft-lbs
Max. Make-Up Torque	14,100	ft-lbs
Yield Torque	20,600	ft-lbs



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IPSCO

OXY USA Inc. - Iridium MDP1 28-21 Federal Com 41H – Amended Drill Plan

1. Casing Program

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)								
8.5	0	4,000	7.625	26.4	HCL-80	SF	1.125	1.2	1.4	1.4
	4,000	8,960	7.625	26.4	HCL-80	FJ	1.125	1.2	1.4	1.4
6.75	0	19,487	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 SF Torque connections for the 5.5" production casing string as a contingency item to be run only if hole conditions require

Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement from Onshore Order #2 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

2. Cementing Program

Casing	Slurry	#Sks	Wt. (Lb/gal)	Yld ft3/sack	H20 gal/sk	500# Comp. Strength	Slurry Description
Intermediate II 1st Stage	Lead	91	13.2	1.65	6.686	3:49	Retarder, Dispersant, Salt
	Tail	56	13.2	1.65	6.69	3:49	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
	Tail	331	12.8	1.76	9.38	9:49	Extender. Accelerator, Dispersant
Production	Lead	N/A	N/A	N/A	N/A	N/A	N/A
	Tail	820	13.2	1.38	6.686	3:49	Retarder, Dispersant, Fluid Loss Control, Extender

Casing String	Top of Lead (ft)	Bottom of Lead (ft)	Top of Tail (ft)	Bottom of Tail (ft)	% Excess Lead	% Excess Tail
Int II (1st Stage)	6141	8000	8000	8960	25%	5%
Int II (2nd Stage)	N/A	N/A	0	6141	N/A	5%
Production	N/A	N/A	8460	19746	N/A	20%

BOP Break Testing Request

As per the agreement reached in the Oxy/BLM meeting on Feb 22, 2018, Oxy requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.
- Full BOP test will be required prior to drilling any production hole.

3. 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	4252	Saturated Brine-Based Mud	9.8-10.0	35-45	N/C
4252	19487	Water-Based or Oil-Based Mud	9.5-12.0	38-50	N/C