Form 3160-5 (June 2015)	UNITED STATES	ERIOR		FORM AP	PROVED 1004-0137
В	UREAU OF LAND MANAGE	MENT	12 6 • • .	5. Lease Serial No.	ary 31, 2018
SUNDRY	NOTICES AND REPORT	rs on wetle had	Fiero	NMNM069376	
abandoned we	II. Use form 3160-3 (APD)	for such property.	Hobl	6. If Indian, Allottee or T	ribe Name
SUBMIT IN	TRIPLICATE - Other instru	ctions on page 2 B B	3 0CD	7. If Unit or CA/Agreeme	ent, Name and/or No.
1. Type of Well 1. Type of Well Image: Second state of the second state of	her	OCT 1	0 2018	8. Well Name and No. TACO CAT 27-34 FE	DERAL COM 21H
2. Name of Operator OXY USA INC	Contact: D/ E-Mail: david_stewar		EIVED	9. API Well No. 30-025-44934	<u> </u>
3a. Address P.O. BOX 50250 MIDLAND, TX 79710	3 F	b. Phone No. (include area co Ph: 432-685-5717	de)	10. Field and Pool or Exp RED TANK BONE	loratory Area SPRING
4. Location of Well (Footage, Sec., 2	T., R., M., or Survey Description)			11. County or Parish, Star	te
Sec 27 T22S R32E NWNW 2 32.369205 N Lat, 103.66857	60FNL 785FWL I W Lon			LEA COUNTY, NN	1
12. CHECK THE A	PPROPRIATE BOX(ES) To	O INDICATE NATURE	OF NOTICE	, REPORT, OR OTHE	R DATA
TYPE OF SUBMISSION		ТҮРЕ	OF ACTION		
B Notice of Intent	C Acidize	Deepen	🗖 Produc	tion (Start/Resume)	□ Water Shut-Off
	□ Alter Casing	Hydraulic Fracturin	ig 🔲 Reclan	nation	Well Integrity
Subsequent Report	Casing Repair	New Construction	🗖 Recom	plete	Other Change to Original A
Final Abandonment Notice	Change Plans	Plug and Abandon	🗖 Tempo	rarily Abandon	PD
	Convert to Injection	Plug Back	U Water	Disposal	
15. Describe Proposal is to deepen direction Attach the Bond under which the wo following completion of the involve testing has been completed. Final A determined that the site is ready for OXY USA Inc. respectfully re contingency string to be run of be necessary. Please see at	ally or recomplete horizontally, giv ork will be performed or provide the d operations. If the operation resul bandonment Notices must be filed final inspection. quests the option to run a 7- only if severe hole conditions tached for changes in casing	e subsurface locations and me e Bond No. on file with BLM/ ts in a multiple completion or i only after all requirements, inc 5/8" Intermediate II casir dictate an additional cas , cementing, mud progra	g as a stred and true v BIA. Required st ecompletion in a luding reclamation g as a sing string to im design. an	ertical depths of all pertinent absequent reports must be file new interval, a Form 3160-4 on, have been completed and	and contactor interest. markers and zones. ed within 30 days must be filed once the operator has
Testing.		CON	SEE ATT. DITIONS	ACHED FOR OF APPROVA	L
14. I hereby certify that the foregoing i	s true and correct. Electronic Submission #43 For OX	6907 verified by the BLM \ Y USA INC sent to the H	Vell Informatio	n System	
	Committed to AFMSS for p	processing by MUSTAFA I	AQUE on 09/2	6/2018 ()	
Name (Printed/Typed) DAVID S	TEWART	Title SR. I	REGULATOR	Y ADVISOR	
Signature (Electronic	Submission)	Date 09/2	5/2018		
	THIS SPACE FOR	FEDERAL OR STAT	E OFFICE L	ISE	
	Lee l			Engineer	
Approved By Musteria_ E	reque		roieum	Engineer	Date 07 24 120
Conditions of approval, if any, are attacht certify that the applicant holds legal or equilibrium would article the applicant to the applicant to the second	ed. Approval of this notice does no uitable title to those rights in the su	t warrant or Carl	sbad F	ield Office	
which would entitle the applicant to cond	uer operations mercon.				

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)

Kz ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

This sundry reflects changes in casing, cementing, mud program design, BOP Testing, and a contingency casing, cementing plan.

1. Casing Program

Primary Plan:

.*

Hale Size (in)	Casing Interval		Csg. Size	Weight			SF	or n	Body SF	Joint SF
Hole Size (in)	From (ft)	To (ft)	(in)	(lbs)	Grade Conn.	Collapse	SE BUIST	Tension	Tension	
17.5	0	888	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	6500	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	20998	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SE V	alues will me	et or Excee	d

SF Values will meet or Exceed

Contingency Plan:

									Buoyant	Buoyant
Hala Sina (im)	Casing	Interval	Csg. Size	Weight	Curda	Com	SF		Body SF	Joint SF
nore Size (in)	From (ft)	To (ft)	(in)	(lbs)	Grade Coan.	Collapse	Sr Burst	Tension	Tension	
17.5	0	888	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	6500	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	11100	7.625	26.4	HCL-80	SF (0 ft to 4000 ft) FJ (4000 ft to 11100 ft)	1.125	1.2	1.4	1.4
6.75	0	20998	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF V	alues will me	et or Excee	ed

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.

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

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)	942	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	1929	12.9	1.73	8.784	15:26	Pozzolan Cement, Retarder
Intermediate (Tail)	240	13.2	1.33	6.368	7:11	Class C Cement, Accelerator
Production (Lead)	615	9.0	1.38	6.692	17:50	Class H Cement, Retarder, Dispersant, Salt
Production (Tail)	2012	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	888	100%
Intermediate (Lead)	0	5700	100%
Intermediate (Tail)	5700	6500	20%
Production (Lead)	6000	9500	50%
Production (Tail)	9500	20998	20%

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)	1014	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	1775	10.2	1.88	10.130	14:22	Pozzolan Cement, Retarder
Intermediate (Tail)	240	12.9	1.33	6.370	12:45	Class C Cement, Accelerator
Intermediate II (Lead)	163	9.0	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II (Tail)	50	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)	836	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	888	100%
Intermediate (Lead)	0	5700	100%
Intermediate (Tail)	5700	6500	20%
Intermediate II (Lead)	6000	9100	25%
Intermediate II (Tail)	9100	10100	5%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	9600	20998	20%

*Contingency design will only be employed if Oxy elects to run 7.625" Intermediate II string.

3. 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.

4. Mud Program

De	pth	T	Weight	¥72	XX/- A E
From (ft)	To (ft)	I ype	(ppg)	viscosity	water Loss
0	888	Water-Based Mud	8.6-8.8	40-60	N/C
888	6500	Saturated Brine- Based Mud	9.8-10.0	35-45	N/C
6500	20998	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.

iechnical daia skeei imk op sf 7.625 x 26.4 lbu hc

TUBULAR PARAMETERS		PIPE BODY PROPERTIES	
Nominal OD, (inch)	7.625	PE Weight, (lbs/ft)	25.56
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft)	26.40
Pipe Grade	L80 HC	Nominal ID, (inch)	6.969
Drift	Standard	Drift Diameter, (inch)	6.844
CONNECTION PARAMETERS		Nominal Pipe Body Area, (sq inch) Yield Strength in Tension. (klbs)	7.519 601
Connection OD (inch)	7.79	Min. Internal Yield Pressure. (psi)	6 020
Connection ID, (inch)	6.938	Collapse Pressure, (psi)	3 910
Make-Up Loss (inch)	6.029		
Connection Critical Area, (sq inch)	5.948	Internal Pre-suce	
Yield Strength in Tension, (klbs)	533		
Yeld Strength in Compression, (klbs)	533		
Tension Efficiency	89%	TION IN STATE OF THE STATE OF	
Compression Efficiency	89%		
Min. Internal Yield Pressure, (psi)	6 020		
Collapse Pressure, (psi)	3 910	CONFERENCE AND A DECEMBER OF BASE AND	1 Tension
Uniaxial Bending (deg/100ft)	42.7		
MAKE-UP TORQUES			
Yield Torque, (ft-lb)	22 600		
Minimum Make-Up Torque, (ft-lb)	15 000		A. 19 60.
Optimum Make-Up Torque, (ft-lb)	16 500	i zemal forsure	كانته بيكتاب ميسانية فيدكت عل مست (Connegtion) مست (Connegtion)
Maximum Make-Up Torque, (ft-lb)	18 200		



NOTE: The contrast of this Technical Data Sher is for onneod information only and does not guarantic performance on majint must not a particular performance of majint and spectra to a complete shall be provided and does not guarantic performance on majint must not a structular performance on majint must not be a structular performance on majint must not be a structular performance on majint must not be a structular performance on the spectra structular performance on majint must not be a structular performance on the spectra structure of the spectra structure on the spectra structure o

Print date: 07/10/2018 20:00

.

TECHNICAL DATA SHEET TMK UP FJ 7.625 X 26.4 L80 HC

TUBULAR PARAMETERS		PIPE BODY PROPERTIES	
Nominal OD, (inch)	7.625	PE Weight, (lbs/ft)	25.56
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft)	26.40
Pipe Grade	L80 HC	Nominal ID, (inch)	6.969
Drift	Standard	Drift Diameter, (inch)	6.844
		Nominal Pipe Body Area, (sq inch)	7.519
CONNECTION PARAMETERS		Yield Strength in Tension, (klbs)	601
Connection OD (inch)	7.63	Min. Internal Yield Pressure, (psi)	6 020
Connection ID, (inch)	6.975	Collapse Pressure. (psi)	3 910
Make-Up Loss, (inch)	4.165		
Connection Critical Area, (sq inch)	2.520	iotomal l	inssure
Yield Strength in Tension, (klbs)	347		
Yeld Strength in Compression, (klbs)	347		
Tension Efficiency	58%	10014 AF1 5C3/15C	
Compression Efficiency	58%		
Min. Internal Yield Pressure, (psi)	6 020		
Collapse Pressure, (psi)	3 910	Compression 2 States Party and States	Paver Paver
Uniaxial Bending (deg/100ft)	28.0		La la calendaria

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





NOTE: the two month for free next State the expectation of two solvers does not guarantee to the average of the end to a fact allor purpose which only a competent colling and expectation are doesn't and doesn't and doesn't and the solve of the solve of

Print date: 07/10/2018 20:11

PERFORMANCE DATA

TMK UP DQX Technical Data Sheet

Tubular Parameters

Size	5.500	in
Nominal Weight	20.00	lbs/ft
Grade	P-110	
PE Weight	19.81	lbs/ft
Wall Thickness	0.361	in
Nominal ID	4.778	in
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
	•	1

Make-Up Torques

	man destant and the second sec	
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

Printed on: July-29-2014

HOTE

The content of this Technical Data Sheet is for general information only and does not gnarantee performance or impty fitness for a particular purpose, which only a compotent duling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by TMK IPSCO and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest TMK IPSCO technical information, please contact TMK IPSCO Technical Sales toll-free at 1-888-268-2000.

Minimum Yield	110,000	psi
Minimum Tensile	125,000	psi
Yield Load	641,000	lbs
Tensile Load	729.000	lbs
Min. Internal Yield Pressure	12.600	psi
Collapse Pressure	11.100	psi



IPSCO

5.500 in

20.00 lbs/ft

P-110

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INC.
LEASE NO.:	NMNM069376
WELL NAME & NO.:	21H –TACO CAT 27-34 FEDERAL COM
SURFACE HOLE FOOTAGE:	260'/N & 785'/W
BOTTOM HOLE FOOTAGE	180'/S & 500'/W
LOCATION:	Section 27., T22S., R.32E., NMP
COUNTY:	LEA County, New Mexico

Potash		C Secretary	
Cave/Karst Potential	C Low		
Variance	(None	Flex Hose	C Other
Wellhead	C onventional	Multibowl	
Other	□4 String Area	□Capitan Reef	□WIPP

All previous COAs still apply except for the following:

A. CASING

Primary Casing Design:

- 1. The minimum required fill of cement behind the 9 5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 2. The minimum required fill of cement behind the 5 1/2 inch production casing is:
 - Cement as proposed. Operator shall provide method of verification. Excess calculates to 5% - additional cement will be required.

Contingency Casing Design:

- 3. The minimum required fill of cement behind the 9 5/8 inch first intermediate casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Second intermediate casing must be kept at least 2/3rd fluid filled to meet BLM minimum collapse requirement.

- 4. The minimum required fill of cement behind the 7 5/8 inch second intermediate casing is:
 - Cement as proposed. Operator shall provide method of verification. Excess calculates to negative 12% additional cement will be required.
- 5. The minimum required fill of cement behind the 5 1/2 inch production casing is:
 - Cement as proposed. Operator shall provide method of verification. Excess calculates to 18% - additional cement might be required.

MHH 09272018

.

-

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.
- 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 <u>24</u> hours. WOC time will be recorded in the driller's log.
- <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. 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.