Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM32411 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. ✓ DRILL REENTER 1a. Type of work: NMNM105825907 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone ✓ Multiple Zone DR PI FED UNIT 18 7 IPP 12H 2. Name of Operator 9. API Well No. **OXY USA INCORPORATED** <u>30-025-54179</u> 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory P.O. BOX 1002, TUPMAN, CA 93276-1002 (661) 763-6046 BILBREY BASIN/BONE SPRING 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 18/T22S/R32E/NMP At surface SESW / 519 FSL / 1653 FWL / LAT 32.385695 / LONG -103.717595 At proposed prod. zone NENW / 20 FNL / 2650 FWL / LAT 32.413255 / LONG -103.714349 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13 State LEA NM 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 519 feet location to nearest property or lease line, ft. 2560.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 9321 feet / 20301 feet FED: ESB000226 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3629 feet 02/01/2025 45 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) MELISSA GUIDRY / Ph: (713) 366-5716 02/20/2024 Title Advisor Regulatory Sr. Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CHRISTOPHER WALLS / Ph: (575) 234-2234 12/27/2024 Title Office Petroleum Engineer Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the

applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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



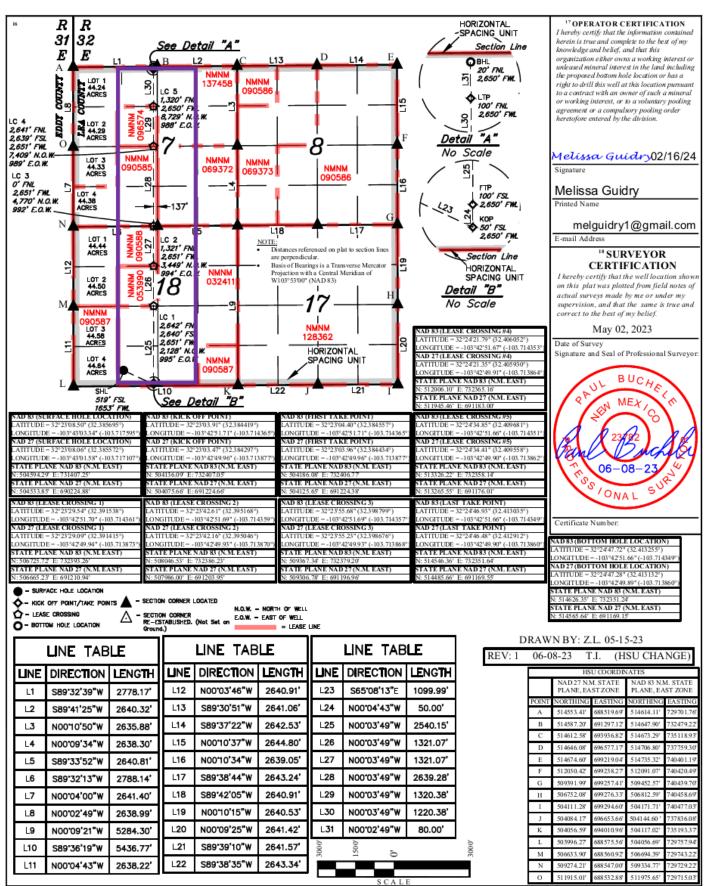
	ved by C-102		2/30/2024 8:			State of Nev						Page 2 o
	Suhmit	Electronical	lv	En		nerals & Natura CONSERVAT			ent			
		Permitting	ıy		012	001102101111	.101, 21,1			Submittal	✓ Initial Su	bmittal
										Type:	☐ Amended	l Report
										31	☐ As Drille	d
						WELL LOCAT	ION INFORM	MATION				
	API Nu	mber 30-	025-54179	Pool Code	9736	6	Pool NameB]]	LBREY	BASIN;	BONE	SPRING,	SOUTH
	Property		2928	Property Na	nme DR	PI FED	UNIT	18_7	7 IPP		Well Number	er
	ogrid 6696			Operator Na		Y USA	INC.				Ground Leve 3628.8'	el Elevation
	Surface	Owner: 🗆	State ☐ Fee ☐	Tribal 🗹 Fed	leral		Mineral (Owner: 🗆 S	State □ Fee I	🗆 Tribal 🗹	Federal	
_				T	_	1	ace Location		1			
	UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E		Latitude		Longitude	County
	/	18	22S	32E		519' FSI	L 1653'	HWL	32.385	5695 -1	103.717595	LEA
_			<u> </u>		1	Bottom	Hole Location	n				
	UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E	/W	Latitude	I	Longitude	County
(C	7	22S	32E		20' FNL	_ 2650'	FWL	32.413	3255 -1	103.714349	LEA
L			1									
	Dedicate	ed Acres	Infill or Defi	ning Well	Defining	Well API	Overlappi	ng Spacing	Unit (Y/N)	Consolidat	tion Code	
6	640		Defining	1	12H -	pending	Υ					
	Order N	umbers.			1		Well setba	icks are und	ler Common (Ownership:	□Yes □No	
						Kick O	ff Point (KOP)				
Г	UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E	,	Latitude	I	Longitude	County
1	V	18	22S	32E		50' FSL	2650'	FWI	32.384	1419 -1	103.714365	LEA
Ŀ	•		220	OZL			ke Point (FTI		02.00			
Г	UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E		Latitude	Т	Longitude	County
	V	18	22S	32E	Lot	100' FSI	_		32.384		Č	LEA
Ŀ	V	10	220	JZL					02.00-	1001	100.7 1-000	
г	UL	Section	Township	D	T -4	1	ke Point (LTF		Latitude	т	Longitude	County
1				Range	Lot	Ft. from N/S	Ft. from E					
_	<u>ر</u>	7	22S	32E		100' FN	L 2000	L AAF	32.413	5035 -	103.714349	LEA
Γ	Unitized	l Area or Ar	rea of Uniform I	nterest	Spacing	Unit Type 🖬 Horiz	ontal □ Vertic	cal		nd Floor Ele	vation:	
L									3628	.8'		
	OPERA	TOR CERT	TIFICATIONS				SURVEYOR	CERTIFIC	CATIONS			
			e information con ief, and, if the wel			plete to the best of						m field notes of actual d correct to the best of
	organiza	tion either ow	ns a working inte	rest or unleased	mineral inter	rest in the land	my belief.	by me or una	er my supervisio		*SURVEYOR CERTIFICATION	a correct to the best of
			l bottom hole loca contract with an c			s well at this r unleased mineral				I hereby c	CERTIFICATION certify that the well location shown lat was plotted from field notes of	
		or to a volunt by the division		ment or a compu	ulsory pooling	g order heretofore				actual su supervisi	rveys made by me or under my on, and that the same is true and o the best of my belief. May 02, 2023	
		•	ıtal well, I further	certify that this	organization	has received the				Date of Se Signature		
	consent o	of at least one	lessee or owner o	f a working inte	rest or unlea	sed mineral interest					UL BUCHE	
			rget pool or forma d or obtained a co			e well's completed the division.				/ /	SEN MEX CO'N	
L	Mel	issa (Guidry	12/30/24	4					Z.	(23/3/2) (06-08-23) 44	
	Signature	:		Date			Signature and S	eal of Profess	ional Surveyor		SIONAL SURL	
	Meliss	a Guidry								Certificate	: Number:	
-	Printed N						Certificate Num	nber	Date of Surve	ey .		
	melis	sa guidr	y@oxy.com	1					May 2,	2023		
1		:—ʊ∽'`,	,				i e		1			

Note: 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.

Email Address

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Manag	gement Plan m	ust be submitted wi	th each Applicat	tion for Permit to I	Orill (APD)) for a new	or recompleted well.
			1 – Plan D fective May 25,				
I. Operator: OXY US	A INC.		OGRID: <u>16</u>	6696		Date: 0 2	/ 1 5/ 2 4
II. Type: Original [☐ Amendment	due to □ 19.15.27.	9.D(6)(a) NMA	C □ 19.15.27.9.D((6)(b) NMA	AC 🗆 Other	·.
If Other, please describe	»:						
III. Well(s): Provide the be recompleted from a s					wells propo	osed to be d	rilled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipa Gas MC		Anticipated Produced Water BBL/D
SEE ATTACHED							
IV. Central Delivery P V. Anticipated Schedu proposed to be recomple	le: Provide the	following informat	tion for each nev	v or recompleted w		-	27.9(D)(1) NMAC]
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		nitial Flow Back Date	First Production Date
SEE ATTACHED							
VII. Separation Equipm VII. Operational Prac Subsection A through F VIII. Best Management during active and planner	tices: Attac of 19.15.27.8	h a complete descr NMAC. ☑ Attach a comple	ription of the ac	tions Operator wil	l take to co	omply with	the requirements of

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

✓ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. \square Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system \square will \square will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator \Box does \Box does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: □ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Released to Imaging: 12/31/2024 9:51:00 AM

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Departor will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In.

Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan.

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) power generation for grid; **(b)** compression on lease; (c)

- (d) liquids removal on lease;
- reinjection for underground storage; (e)
- reinjection for temporary storage; **(f)**
- reinjection for enhanced oil recovery; (g)
- fuel cell production; and (h)
- other alternative beneficial uses approved by the division. (i)

Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Melissa Guidry
Printed Name: Melissa Guidry
Title: Regulatory Advisor Sr.
E-mail Address: melissa_guidry@oxy.com
Date: 02/15/2024
Phone: 713-497-2481
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

III. Well(s)

Well Name	API	WELL LOCATION (ULSTR)	Footages	ANTICIPATED OIL BBL/D	ANTICIPATED GAS MCF/D	ANTICIPATED PROD WATER BBL/D
DR PI FED UNIT 18_7 IPP 11H	PENDING	N-18-T22S-R32E	519 FSL 1623 FWL	1500	5,500	5000
DR PI FED UNIT 18_7 IPP 12H	PENDING	N-18-T22S-R32E	519 FSL 1623 FWL	1500	5,500	5000
DR PI FED UNIT 18_7 IPP 3H	PENDING	P-18-T22S-R32E	170 FSL 925 FEL	1500	5,000	5000
DR PI FED UNIT 18_7 IPP 4H	PENDING	P-18-T22S-R32E	170 FSL 865 FEL	1500	5,000	5000
DR PI FED UNIT 18_7 IPP 15H	PENDING	P-18-T22S-R32E	170 FSL 895 FEL	1500	5,500	5000
DR PI FED UNIT 18_7 IPP 1H	PENDING	N-18-T22S-R32E	308 FSL 1535 FWL	1500	5,000	5000
DR PI FED UNIT 18_7 IPP 2H	PENDING	N-18-T22S-R32E	309 FSL 1565 FWL	1500	5,000	5000

V. Anticipated Schedule

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
DR PI FED UNIT 18_7 IPP 11H	PENDING	TBD	TBD	TBD	TBD	TBD
DR PI FED UNIT 18_7 IPP 12H	PENDING	TBD	TBD	TBD	TBD	TBD
DR PI FED UNIT 18_7 IPP 3H	PENDING	TBD	TBD	TBD	TBD	TBD
DR PI FED UNIT 18_7 IPP 4H	PENDING	TBD	TBD	TBD	TBD	TBD
DR PI FED UNIT 18_7 IPP 15H	PENDING	TBD	TBD	TBD	TBD	TBD
DR PI FED UNIT 18_7 IPP 1H	PENDING	TBD	TBD	TBD	TBD	TBD
DR PI FED UNIT 18_7 IPP 2H	PENDING	TBD	TBD	TBD	TBD	TBD



Email address:

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Operator Certification Data Report 12/27/2024

Operator

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: MELISSA GUIDRY		Signed on: 02/20/2024
Title: Advisor Regulatory Sr.		
Street Address: 5 GREENWAY PLA	AZA SUITE 110	
City: HOUSTON	State: TX	Zip: 77026
Phone: (713)497-2481		
Email address: MELISSA_GUIDRY	@OXY.COM	
Field		
Representative Name:		
Street Address:		
City: St	ate:	Zip:
Phone:		



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Application Data

APD ID: 10400097199

Submission Date: 02/20/2024

Operator Name: OXY USA INCORPORATED

Well Name: DR PI FED UNIT 18_7 IPP

Well Number: 12H

Well Type: OIL WELL

BLM Office: Carlsbad

Well Work Type: Drill

Highlighted data reflects the most recent changes Show Final Text

Section 1 - General

User: MELISSA GUIDRY **Title:** Advisor Regulatory Sr.

Zip: 93276-1002

Federal/Indian APD: FED Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM32411 Lease Acres:

Surface access agreement in place? Allotted? Reservation:

Agreement in place? YES Federal or Indian agreement: FEDERAL

Agreement number: NMNM105825907

Agreement name:

Keep application confidential? N

Permitting Agent? NO APD Operator: OXY USA INCORPORATED

Operator letter of

Operator Info

Operator Organization Name: OXY USA INCORPORATED

Operator Address: P.O. BOX 1002

Operator PO Box:

Operator City: TUPMAN State: CA

Operator Phone: (661)763-6046

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO Master Development Plan name:

Well in Master SUPO? NO Master SUPO name:

Well in Master Drilling Plan? NO Master Drilling Plan name:

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H Well API Number:

Field/Pool or Exploratory? Field and Pool Field Name: BILBREY BASIN Pool Name: BONE SPRING

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Is the proposed well in an area containing other mineral resources? USEABLE WATER, NATURAL GAS, OIL

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: Number: 18_4
LSTTNK_22S32E

Well Class: HORIZONTAL Number of Legs: 1

Well Work Type: Drill
Well Type: OIL WELL
Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: Distance to nearest well: 30 FT Distance to lease line: 519 FT

Reservoir well spacing assigned acres Measurement: 2560 Acres Well plat: DrPiFedUnit18_7IPP12H_C102_20240219100502.pdf

DrPiFedUnit18_7IPP12H_SITEPLAN_20240219100512.pdf

Well work start Date: 02/01/2025 Duration: 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number: Reference Datum: GROUND LEVEL

Wellbore	IS-Foot	NS Indicator	EW-Foot	EW Indicator	dsw	Range	Section	Aliquot/Lot/Tract	atitude	Longitude	ounty	State	Meridian	ease Type	ease Number	Elevation	MD	VD	Will this well produce from this
_	519	FSL			<u>⊢</u> 22S	<u>∝</u> 32E	<u>က</u> 18	∢ Aliquot SESW	32.38569 5		LEA	NEW MEXI CO	NEW	F	NMNM 32411	з62 9	0	0	N ===
KOP Leg #1	50	FSL	265 0	FW L	22S	32E	18	Aliquot SESW	32.38441 9	- 103.7143 65	LEA	NEW MEXI CO			NMNM 32411	- 500 0	882 7	862 9	N

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	100	FSL		FW L	22S	32E	18	Aliquot SESW	32.38455 7	- 103.7143 65	LEA	MEXI CO	NEW MEXI CO	F	NMNM 32411	- 569 2	986 2	932 1	Υ
PPP Leg #1-2	264 2	FNL	265 1	FW L	22S	32E	18	Aliquot SENW	32.39153 8	- 103.7143 61	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 53990	- 569 2	123 98	932 1	Υ
PPP Leg #1-3	132 1	FNL	265 1	FW L	22S	32E	18	Aliquot NENW	32.39516 8	- 103.7143 59	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 90588	- 569 2	137 26	932 1	Υ
PPP Leg #1-4	0	FSL	265 1	FW L	22S	32E	7	Aliquot SESW	32.39879 9	- 103.7143 57	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 90585	- 569 2	150 40	932 1	Υ
PPP Leg #1-5	264 1	FNL	265 1	FW L	22S	32E	7	Aliquot SENW	32.40605 2	- 103.7143 53	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 96574	- 569 2	176 79	932 1	Y
PPP Leg #1-6	132 0	FNL	265 0	FW L	22S	32E	7	Aliquot NENW	32.40968 1	- 103.7143 51	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 137458	- 569 2	189 99	932 1	Υ
EXIT Leg #1	100	FNL		FW L	22S	32E	7	Aliquot NENW	32.41303 5	- 103.7143 49	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 137458	- 569 2	202 22	932 1	Υ
BHL Leg #1	20	FNL	265 0	FW L	22S	32E	7	Aliquot NENW	32.41325 5	- 103.7143 49	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 137458	- 569 2	203 01	932 1	N

Well Name: DR PI FED UNIT 18_7 IPP



APD ID: 10400097199

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report

Submission Date: 02/20/2024

Operator Name: OXY USA INCORPORATED

Well Number: 12H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14741207	RUSTLER	3629	859	859	ANHYDRITE, DOLOMITE, SHALE	USEABLE WATER	N
14741208	SALADO	2478	1151	1151	ANHYDRITE, DOLOMITE, HALITE, SHALE	OTHER : SALT	N
14741209	CASTILE	778	2851	2851	ANHYDRITE	OTHER : SALT	N
14741210	DELAWARE	-1007	4636	4637	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	Y
14741211	BELL CANYON	-1069	4698	4700	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	Y
14741212	CHERRY CANYON	-1923	5552	5590	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	Y
14741213	BRUSHY CANYON	-3133	6762	6863	SANDSTONE, SILTSTONE	OTHER : LOSSES	N
14741214	BONE SPRING	-4894	8523	8714	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M Rating Depth: 9321

Equipment: 13-5/8" 5M Annular, 5M Blind Ram, 5M Double Ram

Requesting Variance? YES

Variance request: Request for the use of a flexible choke line from the BOP to Choke Manifold.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. 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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. OXY requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. See the attached BOP Break Testing variance.

Choke Diagram Attachment:

DrPiFedUnit18 7IPP12H ChkManifolds 20240220073522.pdf

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

DrPiFedUnit18_7IPP12H_ChkManifolds_20240220073522.pdf

BOP Diagram Attachment:

DrPiFedUnit18_7IPP12H_BOP_20240220073527.pdf

 $DrPiFedUnit18_7IPP12H_13inADAPT_13.375in_9.625in_10x10_20240220073537.pdf$

DrPiFedUnit18_7IPP12H_FlexHoseCert_20240220073557.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	919	0	919	3629	2710	919	J-55	54.5	BUTT	1	1.1	BUOY	1.4	BUOY	1.4
2	INTERMED IATE	12.2 5	7.625	NEW	API	N	0	8727	0	8530	3698	-4901	8727	HCL -80	29.7	BUTT	1	1.1	BUOY	1.4	BUOY	1.4
3	PRODUCTI ON	6.75	5.5	NEW	API	N	0	20302	0	9321	3698	-5692	20302	P- 110		OTHER - WEDGE 461	1	1.1	BUOY	1.4	BUOY	1.4

Casing Attachments

Casing ID: 1 String SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

DrPiFedUnit18_7IPP12H_CsgCriteria_20240220073710.pdf

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Casing Attachments

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $DrPiFedUnit18_7IPP12H_CsgCriteria_20240220073740.pdf$

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

DrPiFedUnit18_7IPP12H_CsgCriteria_20240220073804.pdf

DrPiFedUnit18_7IPP12H_API_BTC_SC_10.750in_45.50ppf_L80IC_20240220073811.pdf

DrPiFedUnit18_7IPP12H_TNSWedge461_5.500in_20.00ppf_P110CY_20240220073819.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead	1	0	919	960	1.33	14.8	1277	100	Class C	Accelerator

INTERMEDIATE	Lead	2	0	7113	2566	1.71	13.3	4388	25	Class C	Accelerator

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead	1	7113	8727	515	1.65	13.2	850	5	Class H	Accelerator, Dispersant, Salt

PRODUCTION	Lead	1	8227	2030	909	1.38	13.2	1254	25	Class H	Retarder, Dispersant,
				2							Salt

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: 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.

Describe the mud monitoring system utilized: PVT/MD Totco/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	919	WATER-BASED MUD	8.6	8.8							
919	8727	OTHER: SATURATED BRINE-BASED OR OIL-BASED MUD	8	10							
8727	2030 2	OTHER : WATER-BASED MUD OR OIL-	8	9.6							Page 4 of 6

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

		Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
--	--	-----------	--------------	----------	----------------------	----------------------	---------------------	-----------------------------	----	----------------	----------------	-----------------	----------------------------

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

GR from TD to surface (horizontal well vertical portion of hole)

Mud Log from Bone Spring - TD

CBL (production string) - to be ran by completions.

List of open and cased hole logs run in the well:

GAMMA RAY LOG, CEMENT BOND LOG, DIRECTIONAL SURVEY, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No coring is planned at this time.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4654 Anticipated Surface Pressure: 2603

Anticipated Bottom Hole Temperature(F): 155

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

DrPiFedUnit18_7IPP12H_H2S1_20240220074331.pdf

DrPiFedUnit18_7IPP12H_H2S2_20240220074336.pdf

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

DrPiFedUnit18_7IPP12H_DirectPlan_20240220074349.pdf

Other proposed operations facets description:

Including 4S Contingency documents

Other proposed operations facets attachment:

DrPiFedUnit18_7IPP12H_DrillPlan_3S_20240220074408.pdf

DrPiFedUnit18_7IPP12H_SpudRigData_20240220074415.pdf

DrPiFedUnit18_7IPP12H_DrillPlan_4S_20240220074447.pdf

DrPiFedUnit18_7IPP12H_4SFalconSL1ContingencyTiebackDetails_20240220074452.pdf

DrPiFedUnit18_7IPP12H_13inADAPT_4S_10x15_20240220074456.pdf

DrPiFedUnit18 7IPP12H FalconSL1AnnClearanceVariance 20240220074503.pdf

DrPiFedUnit18_7IPP12H_TNSWedge463_7.827in_39.30ppf_P110S_20240220074508.pdf

Other Variance attachment:

DrPiFedUnit18_7IPP12H_BOPBreakTestingVariance_20240220074515.pdf

DrPiFedUnit18_7IPP12H_BradenheadCBLVariance_20240220074523.pdf

DrPiFedUnit18_7IPP12H_OfflineCementVariance_20240220074529.pdf

DrPiFedUnit18_7IPP12H_ProdCsgAnnClearanceVariance_20240220074534.pdf



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

SUPO Data Report

APD ID: 10400097199

Submission Date: 02/20/2024

Operator Name: OXY USA INCORPORATED

Well Name: DR PI FED UNIT 18_7 IPP

Well Type: OIL WELL

Well Number: 12H

Well Work Type: Drill

Highlighted data reflects the most recent changes Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

DrPiFedUnit18_7IPP12H_ExistRoads_20240220074608.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

DrPiFedUnit18_7IPP12H_NewRoads_20241024111149.pdf

New road type: LOCAL

Length: 3662

Feet

Width (ft.): 30

Max slope (%): 0

Max grade (%): 0

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Watershed diversion every 200', if needed.

New road access plan or profile prepared? N

New road access plan

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: CALICHE

Access onsite topsoil source depth: 0

Offsite topsoil source description:

Onsite topsoil removal process: If available

Access other construction information:

Access miscellaneous information:

Number of access turnouts: Access turnout map:

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: Watershed diversion every 200', if needed.

Road Drainage Control Structures (DCS) description: Watershed diversion every 200', if needed.

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

DrPiFedUnit18_7IPP12H_ExistWells_20240220074747.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description:

Production Facilities map:

DrPiFedUnit18_7IPP12H_LeaseFacility_20241024123323.pdf

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: GW WELL

Water source use type: SURFACE CASING

OTHER Describe use type: DRILLING

INTERMEDIATE/PRODUCTION

CASING

Source latitude: Source longitude:

Source datum:

Water source permit type: WATER WELL

Water source transport method: TRUCKING

PIPELINE

Source land ownership: COMMERCIAL

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 2000 Source volume (acre-feet): 0.25778619

Source volume (gal): 84000

Water source and transportation

DrPiFedUnit18_7IPP12H_GRRWtrSrc_20240220074847.pdf

DrPiFedUnit18_7IPP12H_MesqWtrSrc__1__20240220074855.pdf

DrPiFedUnit18_7IPP12H_Water___Caliche_Source_Map_20241024111332.pdf

Water source comments: This well will be drilled using a combination of water mud systems. It will be obtained from commercial water stations (Gregory Rockhouse, Mesquite) in the area and will be hauled to location by transport truck using existing and proposed roads.

New water well? N

New Water Well Info

Well latitude: Well Longitude: Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft): Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft): Well casing type:

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Well casing outside diameter (in.): Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

Casing length (ft.): Casing top depth (ft.):

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Primary All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM/State/Fee approved pit or from prevailing deposits found on the location. Will use BLM recommended extra caliche from other locations close by for roads, if available. Secondary The secondary way of obtaining caliche to build locations and roads will be by turning over the location. This means, caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cubic yards is max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel: a. The top 6 of topsoil is pushed off and stockpiled along the side of the location. b. An approximate 120 X 120 area is used within the proposed well site to remove caliche. c. Subsoil is removed and piled alongside the 120 X 120 within the pad site. d. When caliche is found, material will be stockpiled within the pad site to build the location and road. e. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road. f. Once the well is drilled the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in the site plan included with this APD.

Construction Materials source location

DrPiFedUnit18 7IPP12H Water Caliche Source Map 20241024111346.pdf

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Water-Based Cuttings, Water-Based Mud, Oil-Based Cuttings, Oil-Based Mud, Produced Water

Amount of waste: 1924 barrels

Waste disposal frequency: Daily

Safe containment description: Haul-Off Bins

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

FACILITY

Disposal type description:

Disposal location description: An approved facility that can process drill cuttings, drill fluids, flowback water, produced water, contaminated soils, and other non-hazardous wastes. Methods of Handling Waste Material: a. A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins.

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility. Solids-CRI, Liquids-Laguna b. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill. c. The supplier, including broken sacks, will pickup slats remaining after completion of well. d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete. e. Disposal of fluids to be transported will be by the following companies. TFH Ltd, Laguna SWD Facility

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Section 9 - Well Site

Well Site Layout Diagram:

DrPiFedUnit18_7IPP12H_ClosedLoop_20241024111529.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: LSTTNK_22S32E

Multiple Well Pad Number: 18_4

Recontouring

DrPiFedUnit18_7IPP12H_LSTTNK_22S32E_18_4_CUT_FILL_20241024111707.pdf

DrPiFedUnit18_7IPP12H_SITEPLAN_20241024111712.pdf

Drainage/Erosion control construction: Reclamation to be wind rowed as needed to control erosion.

Drainage/Erosion control reclamation: Reclamation to be wind rowed as needed to control erosion.

Well pad proposed disturbance Well pad interim reclamation (acres): 2 Well pad long term disturbance

(acres): 9

Road proposed disturbance (acres): 3 Road interim reclamation (acres): 1 Road long term disturbance (acres): 2

Powerline proposed disturbance Powerline interim reclamation (acres): Powerline long term disturbance

(acres): 20 (acres): 0

Pipeline proposed disturbance Pipeline interim reclamation (acres): Pipeline long term disturbance

(acres): 49 33 (acres): 16

Other proposed disturbance (acres): 1 Other interim reclamation (acres): 0 Other long term disturbance (acres): 1

Total proposed disturbance: 82 Total interim reclamation: 56 Total long term disturbance: 27

Disturbance Comments:

Reconstruction method: If the well is deemed commercially productive, caliche from the areas of the pad site not required for operations will be reclaimed. The original topsoil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography, and the are will be seeded with an approved BLM mixture to re-establish vegetation. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. the original topsoil will again be returned to the pad and contoured, as close as possible, to the original topography and the area will be seeded with an approved BLM mixture to re-establish vegetation.

Topsoil redistribution: The original topsoil will be returned to the area of the drill pad not necessary to operate the well.

Soil treatment: To be determined by BLM.

Existing Vegetation at the well pad: To be determined by BLM at onsite.

Existing Vegetation at the well pad

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Existing Vegetation Community at the road: To be determined by BLM at onsite.

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: To be determined by BLM at onsite.

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: To be determined by BLM at onsite.

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Type

Seed Table

Seed Summary

Pounds/Acre

Total pounds/Acre:

Seed reclamation

Operator Contact/Responsible Official

First Name: Mike Last Name: Wilson

Phone: (575)631-6618 Email: Michael_Wilson@oxy.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Existing invasive species treatment

Weed treatment plan description: To be determined by BLM.

Weed treatment plan

Monitoring plan description: To be determined by BLM.

Monitoring plan

Success standards: To be determined by BLM.

Pit closure description: NA

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

Operator Name: OXY USA INCORPORATED Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H **BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: Military Local Office: USFWS Local Office:** Other Local Office: **USFS** Region: **USFS Forest/Grassland: USFS** Ranger District: Disturbance type: PIPELINE Describe: Surface Owner: BUREAU OF LAND MANAGEMENT Other surface owner description: **BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: Military Local Office: USFWS Local Office:** Other Local Office: **USFS** Region: **USFS Forest/Grassland:**

USFS Ranger District:

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Disturbance type: OTHER

Describe: ELECTRIC LINES

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other

Right of Way needed? Y

Use APD as ROW? Y

ROW Type(s): 281001 ROW - ROADS,285003 ROW - POWER TRANS,288100 ROW - O&G Pipeline,288101 ROW - O&G Facility Sites,289001 ROW- O&G Well Pad

ROW

SUPO Additional Information: Permian Basin MOA: To be submitted after APD acceptance. GIS shapefiles available for BLM.

Use a previously conducted onsite? N

Previous Onsite information:

Other SUPO

DrPiFedUnit18_7IPP12H_StakingSheet_20240220075315.pdf DrPiFedUnit18_7IPP12H_NGMP_20240220075356.pdf



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT PWD Data Report

PWD disturbance (acres):

Operator Name: OXY USA INCORPORATED

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Well Type: OIL WELL Well Work Type: Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Lined pit Monitor description:

Lined pit Monitor

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres):

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

Do you propose to put the produced water to beneficial use?

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic

State

Unlined Produced Water Pit Estimated

Unlined pit: do you have a reclamation bond for the pit?

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information

Section 4 -

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: Injection well name:

Assigned injection well API number? Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection

Underground Injection Control (UIC) Permit?

UIC Permit

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Released to Imaging: 12/31/2024 9:51:00 AM

Well Name: DR PI FED UNIT 18_7 IPP Well Number: 12H

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Bond Info Data

APD ID: 10400097199

Operator Name: OXY USA INCORPORATED

Well Name: DR PI FED UNIT 18_7 IPP

Well Type: OIL WELL

Submission Date: 02/20/2024

Highlighted data reflects the most recent changes Show Final Text

Well Number: 12H

Well Work Type: Drill

Bond

Federal/Indian APD: FED

BLM Bond number: ESB000226

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information

Oxy USA Inc. - Dr Pi Fed Unit 18_7 IPP 12H Drill Plan

1. Geologic Formations

TVD of Target (ft):	9321	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	20302	Deepest Expected Fresh Water (ft):	859

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	859	859	
Salado	1151	1151	Salt
Castile	2851	2851	Salt
Delaware	4637	4636	Oil/Gas/Brine
Bell Canyon	4700	4698	Oil/Gas/Brine
Cherry Canyon	5590	5552	Oil/Gas/Brine
Brushy Canyon	6863	6762	Losses
Bone Spring	8714	8523	Oil/Gas
Bone Spring 1st			Oil/Gas
Bone Spring 2nd			Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

^{*}H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

		N	ID	T\	/D				
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	17.5	0	919	0	919	13.375	54.5	J-55	ВТС
Intermediate	12.25	0	8727	0	8530	7.625	29.7	L-80 HC	втс
Production	6.75	0	20302	0	9321	5.5	20	P-110	Wedge 461

All casing strings will be tested in accordance with 43 CFR part 3170 Subpart 3172

*Oxy requests the option to run the 10.75" Intermediate I as a contingency string to be run only if severe hole conditions dictate an additional casing string necessary. This would make the planned 7.625" / 7.827" Casing the Intermediate II.

**If 4S Contingency is not required, Oxy requests permission to transition from 12.25" to 9.875" Intermediate I at 1st trip point below Brushy top (estimated top in formation table above). Cement volumes will be updated on C103 submission.

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	All Casing	SF Values	will meet	or exceed							
	those below										
	SF SF Body SF Joint SF										
- 1	эг	эг	Bouy 3r	JOHN SF							
	Collapse	0.		Tension							

Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement. Please see Annular Clearance Variance attachment for further details.

	Y or N
I	_
Is casing new? If used, attach certification as required in 43 CFR 3160	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards?	Y
If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y
the collapse pressure rating of the casing?	1
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
	_
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Occidental - Permian New Mexico Dr Pi Fed Unit 18_7 IPP 12H

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	960	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	515	1.65	13.2	5%	7,113	Circulate	Class H+Accel., Disper., Salt
Int.	2	Intermediate 2S - Tail BH	2566	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	909	1.38	13.2	25%	8,227	Circulate	Class H+Ret., Disper., Salt

Offline Cementing Request

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365. Please see Offline Cementing Variance attachment for further details.

Bradenhead CBL Request

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8" intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see Bradenhead CBL Variance attachment for further details.

Occidental - Permian New Mexico Dr Pi Fed Unit 18_7 IPP 12H

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP		Туре	1	Tested to:	Deepest TVD Depth (ft) per Section:	
		5M		Annular	✓	70% of working pressure		
				Blind Ram	✓			
12.25" Hole	13-5/8"	5M	Pipe Ram			250 psi / 5000 psi	8530	
			Double Ram		✓	230 psi / 3000 psi		
			Other*				<u> </u>	
	13-5/8"	5M		Annular	✓	70% of working pressure		
6.75" Hole		5M	Blind Ram		✓		9321	
				Pipe Ram		250 psi / 5000 psi		
				Double Ram	✓	230 psi / 3000 psi		
			Other*					

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

^{*}Specify if additional ram is utilized

Dr Pi Fed Unit 18 7 IPP 12H

Occidental - Permian New Mexico

Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.

On Exploratory wells or 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. Will be tested in accordance with 43 CFR part 3170 Subpart 3172.

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per 43 CFR part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.

See attached schematics.

BOP Break Testing Request

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see BOP Break Testing Variance attachment for further details.

Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.

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Occidental - Permian New Mexico Dr Pi Fed Unit 18_7 IPP 12H

5. Mud Program

Section	Depth - MD		Depth - TVD		Toma	Weight	Viceeity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss
Surface	0	919	0	919	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	919	8727	919	8530	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	8727	20302	8530	9321	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.

What will be used to monitor the	PVT/MD Totco/Visual Monitoring
loss or gain of fluid?	F V 1/1VID TOLCO/ VISUAL IVIOLITIONING

6. Logging and Testing Procedures

Loggi	ng, Coring and Testing.				
Yes Will run GR from TD to surface (horizontal well – vertical portion of hole).					
res	Stated logs run will be in the Completion Report and submitted to the BLM.				
No	Logs are planned based on well control or offset log information.				
No	Drill stem test? If yes, explain				
No	Coring? If yes, explain				

Addit	ional logs planned	Interval
No	Resistivity	
No	Density	
Yes	CBL	Production string
Yes	Mud log	Bone Spring – TD
No	PEX	

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Occidental - Permian New Mexico Dr Pi Fed Unit 18_7 IPP 12H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4654 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	155°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR part 3170 Subpart 3172. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N	H2S is present
Υ	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	
We plan to drill the 4 well pad in batch by section: all surface sections, intermediate	Yes
sections and production sections. The wellhead will be secured with a night cap whenever	res
the rig is not over the well.	
Will more than one drilling rig be used for drilling operations? If yes, describe.	
Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for	
this well. If the timing between rigs is such that Oxy would not be able to preset surface,	Yes
the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the	
attached document for information on the spudder rig.	

Total Estimated Cuttings Volume: 1924 bbls

OXY USA Inc APD ATTACHMENT: SPUDDER RIG DATA

OPERATOR NAME / NUMBER: OXY USA Inc

1. SUMMARY OF REQUEST:

Oxy USA respectfully requests approval for the following operations for the surface hole in the drill plan:

1. Utilize a spudder rig to pre-set surface casing for time and cost savings.

2. Description of Operations

- 1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
 - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR part 3170 Subpart 3172, all COAs and NMOCD regulations).
 - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
- 2. The wellhead will be installed and tested as soon as the surface casing is cut off and the WOC time has been reached.
- **3.** A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wingvalves.
 - **a.** A means for intervention will be maintained while the drilling rig is not over the well.
- 4. Spudder rig operations are expected to take 2-3 days per well on the pad.
- 5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
- **6.** Drilling operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nippled up and tested on the wellhead before drilling operations resume on each well.
 - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
 - b. The BLM will be contacted / notified 24 hours before the larger rig moves back on the pre-set locations.
- 7. Oxy will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
- **8.** Once the rig is removed, Oxy will secure the wellhead area by placing a guard rail around the cellar area.

Oxy USA Inc. - Dr Pi Fed Unit 18_7 IPP 12H Drill Plan

1. Geologic Formations

TVD of Target (ft):	9321	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	20302	Deepest Expected Fresh Water (ft):	859

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	859	859	
Salado	1151	1151	Salt
Castile	2851	2851	Salt
Delaware	4637	4636	Oil/Gas/Brine
Bell Canyon	4700	4698	Oil/Gas/Brine
Cherry Canyon	5590	5552	Oil/Gas/Brine
Brushy Canyon	6863	6762	Losses
Bone Spring	8714	8523	Oil/Gas
Bone Spring 1st			Oil/Gas
Bone Spring 2nd			Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

^{*}H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

	N	ID	T\	/D					
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	17.5	0	919	0	919	13.375	54.5	J-55	втс
Salt	12.25	0	4736	0	4732	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	8727	0	8530	7.827	39.3	P110S	Wedge 463
Production	6.75	8527	20302	8330	9321	5.5	20	P-110	Wedge 461

All casing strings will be tested in accordance with 43 CFR part 3170 Subpart 3172

All Casing SF Values will meet or									
exceed those below									
SF SF Body SF Joint SF									
31	31	bouy 3r	JUILL SE						
Collapse		Tension							

*If Production Casing Connection OD does not meet 0.422" annular clearance inside casing:

- Cement excess will be circulated from Top of Liner to surface (Cement Confirmation)
- Liner Top will be tested to confirm seal
- If ICP in Bone Spring Pool and lateral landed in Wolfcamp Pool, a CBL will be ran.

	Y or N
Is casing new? If used, attach certification as required in 43 CFR 3160	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards?	Y
If not provide justification (loading assumptions, casing design criteria).	1
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y
the collapse pressure rating of the casing?	1
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
	-
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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Occidental - Permian New Mexico Dr Pi Fed Unit 18_7 IPP 12H

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	960	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	4,236	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	667	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	203	1.65	13.2	5%	7,113	Circulate	Class H+Accel., Disper., Salt
Int. 2	2	Intermediate 2S - Tail BH	914	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	889	1.38	13.2	25%	8,527	Circulate	Class H+Ret., Disper., Salt

Offline Cementing Request

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365. Please see Offline Cementing Variance attachment for further details.

Bradenhead CBL Request

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8" intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see Bradenhead CBL Variance attachment for further details.

Cement Top and Liner Overlap

• Oxy is requesting permission to have minimum fill of cement behind the 5-1/2" production liner to be 200 ft into previous casing string

The reason for this is so that we can come back and develop shallower benches from the same 7.625"/7.827" mainbore in the future

Cement will be brought to the top of this liner hanger

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4. Pressure Control Equipment

POD installed and Min											
BOP installed and		Min.					TVD Depth				
tested before drilling	Size?	Required		Туре	- ✓	Tested to:	(ft) per				
which hole?		WP					Section:				
		5M		Annular	✓	70% of working pressure					
				Blind Ram	✓		•				
12.25" Hole	13-5/8"	5M		Pipe Ram		250 psi / 5000 psi	4732				
		JIVI		Double Ram	✓	230 psi / 3000 psi					
			Other*								
	13-5/8"	5M		Annular	✓	70% of working pressure					
				Blind Ram	✓						
9.875" Hole		5M	Pipe Ram			250 psi / 5000 psi	8530				
		SIVI		Double Ram	✓	250 psi / 5000 psi	ļ				
			Other*								
		5M		Annular	✓	70% of working pressure					
				Blind Ram	✓		,				
6.75" Hole	13-5/8"	5M		Pipe Ram		250 psi / 5000 psi	9321				
		SIVI		Double Ram	✓	250 psi / 5000 psi					
			Other*								

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

^{*}Specify if additional ram is utilized

Dr Pi Fed Unit 18 7 IPP 12H

Occidental - Permian New Mexico

Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.

On Exploratory wells or 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. Will be tested in accordance with 43 CFR part 3170 Subpart 3172.

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per 43 CFR part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.

See attached schematics.

BOP Break Testing Request

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see BOP Break Testing Variance attachment for further details.

Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.

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Occidental - Permian New Mexico Dr Pi Fed Unit 18_7 IPP 12H

5. Mud Program

Section	Dep	th	Depth -	TVD	Tema	Weight	Viceeity	Water	
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss	
Surface	0	919	0	919	Water-Based Mud	8.6 - 8.8	40-60	N/C	
Intermediate 1	919	4736	919	4732	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C	
Intermediate 2	4736	8727	4732	8530	Water-Based or Oil- Based Mud	8.0 - 10.0	38-50	N/C	
Production	8727	20302	8530	9321	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.

What will be used to monitor the	PVT/MD Totco/Visual Monitoring
loss or gain of fluid?	PV1/IVID TOLCO/VISUAL IVIOLITIONING

6. Logging and Testing Procedures

Loggi	Logging, Coring and Testing.							
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole).							
1 68	Stated logs run will be in the Completion Report and submitted to the BLM.							
No	Logs are planned based on well control or offset log information.							
No	Drill stem test? If yes, explain							
No	Coring? If yes, explain							

Addit	ional logs planned	Interval
No	Resistivity	
No	Density	
Yes	CBL	Production string
Yes	Mud log	Bone Spring – TD
No	PEX	

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Occidental - Permian New Mexico Dr Pi Fed Unit 18_7 IPP 12H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4654 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	155°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR part 3170 Subpart 3172. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

ב ב	LIVI.
Ν	H2S is present
Υ	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. We plan to drill the 4 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Total Estimated Cuttings Volume: 1721 bbls

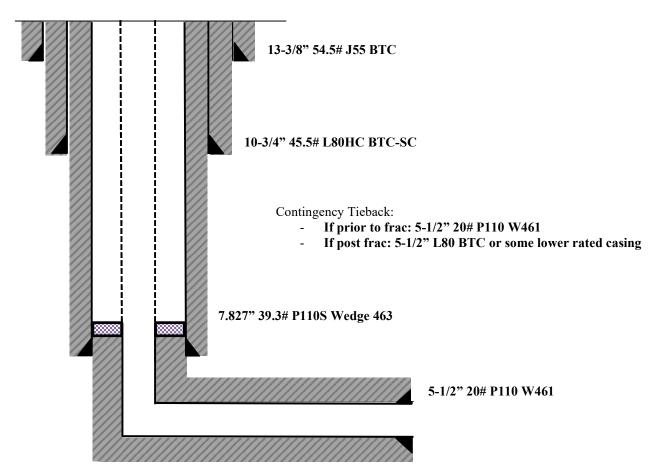
OXY USA WTP LP

4S Falcon SL1 Contingnecy Tieback Details

Below is a summary that describes the general operational steps to drill and complete the well.

- Drill 17-1/2" hole x 13-3/8" casing for surface section. Cement to surface.
- Drill 12-1/4" hole x 10-3/4" casing for intermediate #1 section. Cement to surface.
- Drill 9-7/8" hole x 7.827" casing for intermediate #2 section. Cement to surface.
- Drill 6-3/4" hole x 5-1/2" liner for production section. Cement to top of liner, 200' inside 7.827" shoe.
- Release drilling rig from location.
- If contingency tieback required pre-frac:
 - Move in workover rig and run a 5-1/2" 20# P110 Wedge 461 tie-back frac string and seal assembly. Tie into liner hanger Polished Bore Receptacle (PBR) with seal assembly.
 - o Pump hydraulic fracture job.
 - Flowback and produce well.
- If contingency tieback required post-frac:
 - o Move in workover rig and run a 5-1/2" L80 BTC or lesser rated tie-back string and seal assembly. Tie into liner hanger Polished Bore Receptacle (PBR) with seal assembly.
 - o Return well to production.

General well schematic:



PRD NM DIRECTIONAL PLANS (NAD 1983) I Prefer Pi 18_7 Federal Com Dr Pi Fed Unit 18_7 IPP 12H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

20 November, 2023

Planning Report

HOPSPP Database:

Company: **ENGINEERING DESIGNS**

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: I Prefer Pi 18_7 Federal Com Well: Dr Pi Fed Unit 18_7 IPP 12H

Wellbore: Wellbore #1 Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Dr Pi Fed Unit 18_7 IPP 12H

RKB = 26' @ 3654.80ft (H&P 419) RKB = 26' @ 3654.80ft (H&P 419)

Grid

Minimum Curvature

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System: US State Plane 1983

North American Datum 1983 Geo Datum: Map Zone: New Mexico Eastern Zone

System Datum:

Mean Sea Level

Using geodetic scale factor

I Prefer Pi 18_7 Federal Com

Site Position: Northing: 504,515.55 usft Latitude: 32.385491 From: Мар Easting: 730,590.36 usft Longitude: -103.720243

Position Uncertainty: 0.00 ft Slot Radius: 13.200 in

Well Dr Pi Fed Unit 18_7 IPP 12H

Well Position +N/-S 0.00 ft Northing: 504.594.29 usf Latitude: 32.385695 731,407.25 usf +E/-W 0.00 ft Easting: Longitude: -103.717595

Position Uncertainty 2.00 ft Wellhead Elevation: ft **Ground Level:** 3,628.80 ft

Grid Convergence: 0.33°

Wellbore Wellbore #1

Model Name Declination Field Strength Magnetics Sample Date Dip Angle (°) (nT) HDGM FILE 11/20/2023 6.37 59.98 47,601.50000000

Design Permitting Plan

Audit Notes:

Site

Version: Phase: **PROTOTYPE** Tie On Depth: 0.00

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 5.38

Plan Survey Tool Program Date 11/20/2023

Depth From Depth To

(ft) (ft) Remarks Survey (Wellbore) **Tool Name**

0.00 20,302.46 Permitting Plan (Wellbore #1) B001Mb_MWD+HRGM

OWSG MWD + HRGM

Plan Sections	s									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,205.00	0.00	0.00	4,205.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,104.77	7 18.00	138.50	5,090.05	-104.96	92.86	2.00	2.00	0.00	138.50	
8,827.08	18.00	138.50	8,630.27	-966.27	854.81	0.00	0.00	0.00	0.00	
9,861.51	1 90.00	359.70	9,320.80	-408.23	999.57	10.00	6.96	-13.42	-137.38	FTP (Dr Pi Fed Unit
20,302.46	90.00	359.70	9,320.80	10,032.58	944.04	0.00	0.00	0.00	0.00	PBHL (Dr Pi Fed

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: I Prefer Pi 18_7 Federal Com Well: Dr Pi Fed Unit 18_7 IPP 12H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Dr Pi Fed Unit 18_7 IPP 12H

RKB = 26' @ 3654.80ft (H&P 419) RKB = 26' @ 3654.80ft (H&P 419)

Grid

sign:	Permitting Pia						_		
anned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
E00.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00		0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
,			,						
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2 500 00	0.00	0.00	2 500 00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,205.00	0.00	0.00	4,205.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	1.90	138.50	4,299.98	-1.18	1.04	-1.08	2.00	2.00	0.00
4,400.00	3.90	138.50	4,399.85	-4.97	4.40	-4.54	2.00	2.00	0.00
4,500.00	5.90	138.50	4,499.48	-11.37	10.05	-10.37	2.00	2.00	0.00
4,600.00	7.90	138.50	4,598.75	-20.36	18.01	-18.59	2.00	2.00	0.00
4,700.00	9.90	138.50	4,697.54	-31.95	28.27	-29.16	2.00	2.00	0.00
4,800.00	11.90	138.50	4,795.73	-46.11	40.79	-42.09	2.00	2.00	0.00
4,900.00	13.90	138.50	4,893.20	-62.83	55.59	-57.35	2.00	2.00	0.00
5,000.00	15.90	138.50	4,989.84	-82.09	72.62	-74.93	2.00	2.00	0.00
5,100.00	17.90	138.50	5,085.51	-103.86	91.88	-94.80	2.00	2.00	0.00
5,104.77	18.00	138.50	5,090.05	-104.96	92.86	-95.80	2.00	2.00	0.00
5,200.00	18.00	138.50	5,180.62	-127.00	112.35	-115.92	0.00	0.00	0.00

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: I Prefer Pi 18_7 Federal Com
Well: Dr Pi Fed Unit 18_7 IPP 12H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Dr Pi Fed Unit 18_7 IPP 12H

RKB = 26' @ 3654.80ft (H&P 419) RKB = 26' @ 3654.80ft (H&P 419)

Grid

Design:	Permitting Pla	an							
Planned Survey									
Fiailileu Sui vey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	18.00	138.50	5,275.73	-150.14	132.82	-137.03	0.00	0.00	0.00
5,400.00	18.00	138.50	5,370.84	-173.28	153.29	-158.15	0.00	0.00	0.00
5,500.00	18.00	138.50	5,465.95	-196.42	173.76	-179.27	0.00	0.00	0.00
5,600.00	18.00	138.50	5,561.05	-219.56	194.23	-200.39	0.00	0.00	0.00
5,700.00	18.00	138.50	5,656.16	-242.69	214.70	-221.51	0.00	0.00	0.00
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5,800.00	18.00	138.50	5,751.27	-265.83	235.17	-242.63	0.00	0.00	0.00
5,900.00	18.00	138.50	5,846.38	-288.97	255.64	-263.75	0.00	0.00	0.00
6,000.00	18.00	138.50	5,941.49	-312.11	276.11	-284.87	0.00	0.00	0.00
6,100.00	18.00	138.50	6,036.60	-335.25	296.58	-305.99	0.00	0.00	0.00
6,200.00	18.00	138.50	6,131.70	-358.39	317.05	-327.11	0.00	0.00	0.00
6,300.00	18.00	138.50	6,226.81	-381.53	337.52	-348.23	0.00	0.00	0.00
6,400.00	18.00	138.50	6,321.92	-404.67	357.99	-369.35	0.00	0.00	0.00
6,500.00	18.00	138.50	6,417.03	-427.81	378.46	-390.47	0.00	0.00	0.00
6,600.00	18.00	138.50	6,512.14	-450.95	398.93	-411.59	0.00	0.00	0.00
6,700.00	18.00	138.50	6,607.24	-474.08	419.40	-432.71	0.00	0.00	0.00
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6,800.00	18.00	138.50	6,702.35	-497.22	439.87	-453.83	0.00	0.00	0.00
6,900.00	18.00	138.50	6,797.46	-520.36	460.34	-474.95	0.00	0.00	0.00
7,000.00	18.00	138.50	6,892.57	-543.50	480.81	-496.07	0.00	0.00	0.00
7,100.00	18.00	138.50	6,987.68	-566.64	501.28	-517.19	0.00	0.00	0.00
7,200.00	18.00	138.50	7,082.79	-589.78	521.75	-538.31	0.00	0.00	0.00
7,300.00	18.00	138.50	7,177.89	-612.92	542.22	-559.43	0.00	0.00	0.00
7,400.00	18.00	138.50	7,273.00	-636.06	562.69	-580.55	0.00	0.00	0.00
7,500.00	18.00	138.50	7,368.11	-659.20	583.16	-601.66	0.00	0.00	0.00
7,600.00	18.00	138.50	7,463.22	-682.34	603.63	-622.78	0.00	0.00	0.00
7,700.00	18.00	138.50	7,558.33	-705.47	624.10	-643.90	0.00	0.00	0.00
7,800.00	18.00	138.50	7,653.43	-728.61	644.57	-665.02	0.00	0.00	0.00
7,900.00	18.00	138.50	7,748.54	-751.75	665.04	-686.14	0.00	0.00	0.00
8,000.00	18.00	138.50	7,843.65	-774.89	685.51	-707.26	0.00	0.00	0.00
8,100.00	18.00	138.50	7,938.76	-798.03	705.98	-728.38	0.00	0.00	0.00
8,200.00	18.00	138.50	8,033.87	-821.17	726.45	-749.50	0.00	0.00	0.00
8,300.00	18.00	138.50	8,128.98	-844.31	746.92	-770.62	0.00	0.00	0.00
8,400.00	18.00	138.50	8,224.08	-867.45	767.39	-791.74	0.00	0.00	0.00
8,500.00	18.00	138.50	8,319.19	-890.59	787.86	-812.86	0.00	0.00	0.00
8,600.00	18.00	138.50	8,414.30	-913.73	808.33	-833.98	0.00	0.00	0.00
8,700.00	18.00	138.50	8,509.41	-936.86	828.80	-855.10	0.00	0.00	0.00
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8,800.00	18.00	138.50	8,604.52	-960.00	849.27	-876.22	0.00	0.00	0.00
8,827.08	18.00	138.50	8,630.27	-966.27	854.81	-881.94	0.00	0.00	0.00
8,900.00	13.53	116.95	8,700.49	-978.59	869.90	-892.79	10.00	-6.12	-29.56
9,000.00	12.67	71.87	8,798.13	-980.48	890.80	-892.72	10.00	-0.87	-45.08
9,100.00	18.30	40.01	8,894.63	-965.01	911.36	-875.39	10.00	5.63	-31.85
9,200.00	26.57	25.02	8,987.06	-932.64	930.96	-841.32	10.00	8.28	-14.99
9,300.00	35.70	17.02	9,072.60	-884.35	949.01	-791.56	10.00	9.12	-8.00
9,400.00	45.15	11.98	9,148.66	-821.62	964.94	-727.60	10.00	9.46	-5.04
9,500.00	54.77	8.38	9,212.93	-746.34	978.29	-651.41	10.00	9.62	-3.60
9,600.00	64.47	5.56	9,263.45	-660.81	988.65	-565.29	10.00	9.70	-2.82
9,700.00	74.22	3.16	9,298.69	-567.63	995.69	-471.85	10.00	9.75	-2.40
9,700.00	83.99	0.99	9,298.69	-367.63 -469.62	995.69	-47 1.85 -373.95	10.00	9.75 9.77	-2.40 -2.18
9,861.51	90.00	359.70	9,317.36	-409.02 -408.23	999.21	-373.95 -312.79	10.00	9.77	-2.10 -2.10
9,900.00	90.00	359.70	9,320.80	-406.23 -369.74	999.37	-312.79 -274.49	0.00	0.00	0.00
10,000.00	90.00	359.70	9,320.80	-369.74 -269.74	998.83	-274.49 -174.98	0.00	0.00	0.00
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10,100.00	90.00	359.70	9,320.80	-169.74	998.30	-75.47	0.00	0.00	0.00
10,200.00	90.00	359.70	9,320.80	-69.74	997.77	24.04	0.00	0.00	0.00
10,300.00	90.00	359.70	9,320.80	30.26	997.24	123.55	0.00	0.00	0.00
10,400.00	90.00	359.70	9,320.80	130.26	996.71	223.06	0.00	0.00	0.00
10,500.00	90.00	359.70	9,320.80	230.25	996.18	322.57	0.00	0.00	0.00

Planning Report

Database: Company: Project: HOPSPP

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: I Prefer Pi 18_7 Federal Com
Well: Dr Pi Fed Unit 18_7 IPP 12H

Wellbore: Wellbore #1

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Well Dr Pi Fed Unit 18_7 IPP 12H

RKB = 26' @ 3654.80ft (H&P 419) RKB = 26' @ 3654.80ft (H&P 419)

Grid

Design:	Permitting Pla	an							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,600.00	90.00	359.70	9,320.80	330.25	995.64	422.08	0.00	0.00	0.00
10,700.00	90.00	359.70	9,320.80	430.25	995.11	521.58	0.00	0.00	0.00
10,800.00	90.00	359.70	9,320.80	530.25	994.58	621.09	0.00	0.00	0.00
10,900.00	90.00	359.70	9,320.80	630.25	994.05	720.60	0.00	0.00	0.00
11,000.00	90.00	359.70	9,320.80	730.25	993.52	820.11	0.00	0.00	0.00
11,100.00	90.00	359.70	9,320.80	830.25	992.98	919.62	0.00	0.00	0.00
11,200.00	90.00	359.70	9,320.80	930.24	992.45	1,019.13	0.00	0.00	0.00
11,300.00	90.00	359.70	9,320.80	1,030.24	991.92	1,118.64	0.00	0.00	0.00
11,400.00	90.00	359.70	9,320.80	1,130.24	991.39	1,218.15	0.00	0.00	0.00
11,500.00	90.00	359.70	9,320.80	1,230.24	990.86	1,317.66	0.00	0.00	0.00
11,600.00	90.00	359.70	9,320.80	1,330.24	990.32	1,417.17	0.00	0.00	0.00
11,700.00	90.00	359.70	9,320.80	1,430.24	989.79	1,516.67	0.00	0.00	0.00
11,800.00	90.00	359.70	9,320.80	1,530.24	989.26	1,616.18	0.00	0.00	0.00
11,900.00	90.00	359.70	9,320.80	1,630.23	988.73	1,715.69	0.00	0.00	0.00
12,000.00	90.00	359.70	9,320.80	1,730.23	988.20	1,815.20	0.00	0.00	0.00
12,100.00	90.00	359.70	9,320.80	1,830.23	987.67	1,914.71	0.00	0.00	0.00
12,200.00	90.00	359.70	9,320.80	1,930.23	987.13	2,014.22	0.00	0.00	0.00
12,300.00	90.00	359.70	9,320.80	2,030.23	986.60	2,113.73	0.00	0.00	0.00
12,400.00	90.00	359.70	9,320.80	2,130.23	986.07	2,213.24	0.00	0.00	0.00
12,500.00	90.00	359.70	9,320.80	2,230.23	985.54	2,312.75	0.00	0.00	0.00
12,600.00	90.00	359.70	9,320.80	2,330.22	985.01	2,412.26	0.00	0.00	0.00
12,700.00	90.00	359.70	9,320.80	2,430.22	984.47	2,511.76	0.00	0.00	0.00
12,800.00	90.00	359.70	9,320.80	2,530.22	983.94	2,611.27	0.00	0.00	0.00
12,900.00	90.00	359.70	9,320.80	2,630.22	983.41	2,710.78	0.00	0.00	0.00
13,000.00	90.00	359.70	9,320.80	2,730.22	982.88	2,810.29	0.00	0.00	0.00
13,100.00	90.00	359.70	9,320.80	2,830.22	982.35	2,909.80	0.00	0.00	0.00
13,200.00	90.00	359.70	9,320.80	2,930.22	981.81	3,009.31	0.00	0.00	0.00
13,300.00	90.00	359.70	9,320.80	3,030.21	981.28	3,108.82	0.00	0.00	0.00
13,400.00	90.00	359.70	9,320.80	3,130.21	980.75	3,208.33	0.00	0.00	0.00
13,500.00	90.00	359.70	9,320.80	3,230.21	980.22	3,307.84	0.00	0.00	0.00
13,600.00	90.00	359.70	9,320.80	3,330.21	979.69	3,407.34	0.00	0.00	0.00
13,700.00	90.00	359.70	9,320.80	3,430.21	979.16	3,506.85	0.00	0.00	0.00
13,800.00	90.00	359.70	9,320.80	3,530.21	978.62	3,606.36	0.00	0.00	0.00
13,900.00	90.00	359.70	9,320.80	3,630.21	978.09	3,705.87	0.00	0.00	0.00
14,000.00	90.00	359.70	9,320.80	3,730.20	977.56	3,805.38	0.00	0.00	0.00
14,100.00	90.00	359.70	9,320.80	3,830.20	977.03	3,904.89	0.00	0.00	0.00
14,200.00	90.00	359.70	9,320.80	3,930.20	976.50	4,004.40	0.00	0.00	0.00
14,300.00	90.00	359.70	9,320.80	4,030.20	975.96	4,103.91	0.00	0.00	0.00
14,400.00	90.00	359.70	9,320.80	4,130.20	975.43	4,203.42	0.00	0.00	0.00
14,500.00	90.00	359.70	9,320.80	4,230.20	974.90	4,302.93	0.00	0.00	0.00
14,600.00 14,700.00 14,800.00 14,900.00 15,000.00	90.00 90.00 90.00 90.00 90.00	359.70 359.70 359.70 359.70 359.70	9,320.80 9,320.80 9,320.80 9,320.80 9,320.80 9,320.80	4,330.20 4,430.19 4,530.19 4,630.19 4,730.19	974.37 973.84 973.30 972.77 972.24	4,402.43 4,501.94 4,601.45 4,700.96 4,800.47	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
15,100.00 15,200.00 15,300.00 15,400.00 15,500.00	90.00 90.00 90.00 90.00 90.00	359.70 359.70 359.70 359.70 359.70	9,320.80 9,320.80 9,320.80 9,320.80 9,320.80 9,320.80	4,830.19 4,930.19 5,030.19 5,130.18 5,230.18	971.71 971.18 970.65 970.11 969.58	4,899.98 4,999.49 5,099.00 5,198.51 5,298.02	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
15,600.00	90.00	359.70	9,320.80	5,330.18	969.05	5,397.52	0.00	0.00	0.00
15,700.00	90.00	359.70	9,320.80	5,430.18	968.52	5,497.03	0.00	0.00	0.00
15,800.00	90.00	359.70	9,320.80	5,530.18	967.99	5,596.54	0.00	0.00	0.00
15,900.00	90.00	359.70	9,320.80	5,630.18	967.45	5,696.05	0.00	0.00	0.00
16,000.00	90.00	359.70	9,320.80	5,730.18	966.92	5,795.56	0.00	0.00	0.00

Planning Report

Database: Company: Project: HOPSPP

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: I Prefer Pi 18_7 Federal Com Well: Dr Pi Fed Unit 18_7 IPP 12H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Dr Pi Fed Unit 18_7 IPP 12H

RKB = 26' @ 3654.80ft (H&P 419) RKB = 26' @ 3654.80ft (H&P 419)

Grid

Design:	Permitting Pla	an							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,100.00	90.00	359.70	9,320.80	5,830.18	966.39	5,895.07	0.00	0.00	0.00
16,200.00	90.00	359.70	9,320.80	5,930.17	965.86	5,994.58	0.00	0.00	0.00
16,300.00	90.00	359.70	9,320.80	6,030.17	965.33	6,094.09	0.00	0.00	0.00
16,400.00	90.00	359.70	9,320.80	6,130.17	964.79	6,193.60	0.00	0.00	0.00
16,500.00	90.00	359.70	9,320.80	6,230.17	964.26	6,293.10	0.00	0.00	0.00
16,600.00	90.00	359.70	9,320.80	6,330.17	963.73	6,392.61	0.00	0.00	0.00
16,700.00	90.00	359.70	9,320.80	6,430.17	963.20	6,492.12	0.00	0.00	0.00
16,800.00	90.00	359.70	9,320.80	6,530.17	962.67	6,591.63	0.00	0.00	0.00
16,900.00	90.00	359.70	9,320.80	6,630.16	962.14	6,691.14	0.00	0.00	0.00
17,000.00	90.00	359.70	9,320.80	6,730.16	961.60	6,790.65	0.00	0.00	0.00
				,		,			
17,100.00	90.00	359.70	9,320.80	6,830.16	961.07	6,890.16	0.00	0.00	0.00
17,200.00	90.00	359.70	9,320.80	6,930.16	960.54	6,989.67	0.00	0.00	0.00
17,300.00	90.00	359.70	9,320.80	7,030.16	960.01	7,089.18	0.00	0.00	0.00
17,400.00	90.00	359.70	9,320.80	7,130.16	959.48	7,188.69	0.00	0.00	0.00
17,500.00	90.00	359.70	9,320.80	7,230.16	958.94	7,288.19	0.00	0.00	0.00
17,600.00	90.00	359.70	9,320.80	7,330.15	958.41	7,387.70	0.00	0.00	0.00
17,700.00	90.00	359.70	9,320.80	7,430.15	957.88	7,487.21	0.00	0.00	0.00
17,800.00	90.00	359.70	9,320.80	7,530.15	957.35	7,586.72	0.00	0.00	0.00
17,900.00	90.00	359.70	9,320.80	7,630.15	956.82	7,686.23	0.00	0.00	0.00
18,000.00	90.00	359.70	9,320.80	7,730.15	956.28	7,785.74	0.00	0.00	0.00
18,100.00	90.00	359.70	9,320.80	7,830.15	955.75	7,885.25	0.00	0.00	0.00
18,200.00	90.00	359.70	9,320.80	7,930.15	955.22	7,984.76	0.00	0.00	0.00
18,300.00	90.00	359.70	9,320.80	8,030.14	954.69	8,084.27	0.00	0.00	0.00
18,400.00	90.00	359.70	9,320.80	8,130.14	954.16	8,183.78	0.00	0.00	0.00
18,500.00	90.00	359.70	9,320.80	8,230.14	953.63	8,283.28	0.00	0.00	0.00
18,600.00	90.00	359.70	9,320.80	8,330.14	953.09	8,382.79	0.00	0.00	0.00
18,700.00 18,800.00	90.00 90.00	359.70 359.70	9,320.80 9,320.80	8,430.14 8,530.14	952.56 952.03	8,482.30 8,581.81	0.00 0.00	0.00 0.00	0.00 0.00
,	90.00		,	,	952.03 951.50	,		0.00	
18,900.00 19,000.00	90.00	359.70 359.70	9,320.80 9,320.80	8,630.14 8,730.13	951.50 950.97	8,681.32 8,780.83	0.00 0.00	0.00	0.00 0.00
						,			
19,100.00	90.00	359.70	9,320.80	8,830.13	950.43	8,880.34	0.00	0.00	0.00
19,200.00	90.00	359.70	9,320.80	8,930.13	949.90	8,979.85	0.00	0.00	0.00
19,300.00	90.00	359.70	9,320.80	9,030.13	949.37	9,079.36	0.00	0.00	0.00
19,400.00	90.00	359.70	9,320.80	9,130.13	948.84	9,178.86	0.00	0.00	0.00
19,500.00	90.00	359.70	9,320.80	9,230.13	948.31	9,278.37	0.00	0.00	0.00
19,600.00	90.00	359.70	9,320.80	9,330.13	947.77	9,377.88	0.00	0.00	0.00
19,700.00	90.00	359.70	9,320.80	9,430.12	947.24	9,477.39	0.00	0.00	0.00
19,800.00	90.00	359.70	9,320.80	9,530.12	946.71	9,576.90	0.00	0.00	0.00
19,900.00	90.00	359.70	9,320.80	9,630.12	946.18	9,676.41	0.00	0.00	0.00
20,000.00	90.00	359.70	9,320.80	9,730.12	945.65	9,775.92	0.00	0.00	0.00
20,100.00	90.00	359.70	9,320.80	9,830.12	945.12	9,875.43	0.00	0.00	0.00
20,100.00	90.00	359.70	9,320.80	9,030.12	943.12	9,075.43	0.00	0.00	0.00
20,300.00	90.00	359.70	9,320.80	10,030.12	944.05	10,074.45	0.00	0.00	0.00
20,300.00	90.00	359.70	9,320.80	10,030.12	944.03	10,074.45	0.00	0.00	0.00
20,302.40	90.00	558.70	3,320.00	10,032.30	344.04	10,070.90	0.00	0.00	0.00

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: I Prefer Pi 18_7 Federal Com Well: Dr Pi Fed Unit 18_7 IPP 12H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Dr Pi Fed Unit 18_7 IPP 12H RKB = 26' @ 3654.80ft (H&P 419) RKB = 26' @ 3654.80ft (H&P 419)

Grid

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Dr Pi Fed Unit - plan misses target - Point	0.00 center by 10	0.00 099.85ft at 0	0.00 .00ft MD (0.	-458.22 .00 TVD, 0.00	999.85 N, 0.00 E)	504,136.09	732,407.05	32.384420	-103.714365
PBHL (Dr Pi Fed Unit - plan hits target cer - Point	0.00 nter	0.00	9,320.80	10,032.58	944.04	514,626.35	732,351.24	32.413255	-103.714349
FTP (Dr Pi Fed Unit - plan hits target cer - Point	0.00 nter	0.00	9,320.80	-408.23	999.57	504,186.08	732,406.77	32.384557	-103.714365

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	858.80	858.80	RUSTLER				
	1,150.80	1,150.80	SALADO				
	2,850.80	2,850.80	CASTILE				
	4,637.44	4,635.80	DELAWARE				
	4,700.26	4,697.80	BELL CANYON				
	5,590.27	5,551.80	CHERRY CANYON				
	6,862.51	6,761.80	BRUSHY CANYON				
	8,714.08	8,522.80	BONE SPRING				

Plan Annota	tions				
	Measured	Vertical	Local Coor	dinates	
	Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
	4,205.00	4,205.00	0.00	0.00	Build 2°/100'
	5,104.77	5,090.05	-104.96	92.86	Hold 18° Tangent
	8,827.08	8,630.27	-966.27	854.81	KOP, Build 10°/100'
	9,861.51	9,320.80	-408.23	999.57	Landing Point
	20,302.46	9,320.80	10,032.58	944.04	TD at 20302.46' MD

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: OXY USA INCORPORATED
WELL NAME & NO.: DR PI FED UNIT 18_7 IPP 12H
LOCATION: Section 18, T.22 S., R.32 E.
COUNTY: Lea County, New Mexico

COA

H2S	• Yes	O No	
Potash	None	O Secretary	O R-111-P
Cave/Karst Potential	• Low	O Medium	O High
Cave/Karst Potential	O Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	Multibowl	O Both
Wellhead Variance	O Diverter		
Other	□4 String	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency	☐ EchoMeter	☑ Primary Cement
_	Cement Squeeze		Squeeze
Special Requirements	☐ Water Disposal	☑ COM	□ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements	☑ Break Testing	✓ Offline	☐ Casing
Variance	_	Cementing	Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Only one design approved. Please contact BLM Engineering if casing design change and sundry as needed. Please review cement volumes to ensure tieback is achieved as required below(25% excess required.)

Primary Casing Design:

- 1. The **13-3/8** inch surface casing shall be set at approximately **930** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - BLM Geology Note: The operator purposes to set surface casing at 919 feet, which may not adequately protect usable water zones. BLM suggests to set the surface casing at a depth of 930' to protect the usable water zones. If the Salt is encountered, set casing at least 25 feet above the Salt Formation.
 - 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 will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 7-5/8 inch intermediate casing shall be set at approximately 8530 feet TVD. KEEP CASING 1/2 FULL FOR COLLAPSE SF. PRESSURE TEST NEEDS EXTERNAL PRESSURE REVIEW AS WELL. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

Option 1 (Single Stage):

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

Option 2 (Bradenhead):

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the Brushy Canyon
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified

3. The **5-1/2** inch production casing shall be set at approximately **20,302** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Option 1 (Single Stage):

• Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (70% Working Pressure) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

• The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in Onshore Order 1 and 2.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system) BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Offline cementing OK for surface and intermediate intervals. Notify the BLM prior to the commencement of any offline cementing procedure.

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)

Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM_NM_CFO_DrillingNotifications@BLM.GOV**; (575) 361-2822

Contact Lea County Petroleum Engineering Inspection Staff:

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 1. 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.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - i.Notify the BLM when moving in and removing the Spudder Rig.
 - ii.Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii.BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

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 of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <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 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

- 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-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii.If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii.Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v.If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

- i.In a water basin, 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. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- ii.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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v.The results of the test shall be reported to the appropriate BLM office.
- vi.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.
- vii.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.
- viii.BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. 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.

KPI 11/18/2024

PECOS DISTRICT SURFACE USE

CONDITIONS OF APPROVAL

OPERATOR'S NAME: Oxy USA Inc.

LEASE NO.: NMNM32411

COUNTY: Lea County, New Mexico

Wells:

Dr Pi Fed Unit 17_8 DA 11H

Dr Pi Fed Unit 17_8 DA 12H

Dr Pi Unit 101H

Dr Pi Unit 102H

Dr Pi Fed Unit 17_8 DA 41H

Dr Pi Fed Unit 17_8 DA 42H

Dr Pi Fed Unit 17_8 DA 71H

Dr Pi Fed Unit 17_8 DA 72H

Dr Pi Fed Unit 18_7 IPP 11H

Dr Pi Fed Unit 18_7 IPP 12H

Dr Pi Fed Unit 18_7 IPP 1H

Dr Pi Fed Unit 18_7 IPP 2H

Dr Pi Fed Unit 18_7 IPP 71H

Dr Pi Fed Unit 18_7 IPP 72H

Dr Pi Fed Unit 18_7 IPP 21H

Dr Pi Fed Unit 18_7 IPP 22H

Dr Pi Fed Unit 18_7 IPP 41H

Dr Pi Fed Unit 18_7 IPP 42H

Dr Pi Fed Unit 18_7 IPP 15H

Dr Pi Fed Unit 18_7 IPP 24H

Dr Pi Fed Unit 18_7 IPP 25H

Dr Pi Fed Unit 18_7 IPP 3H

Dr Pi Fed Unit 18_7 IPP 4H

Dr Pi Fed Unit 18_7 IPP 43H

Dr Pi Fed Unit 18_7 IPP 44H

Dr Pi Fed Unit 18_7 IPP 73H

Dr Pi Fed Unit 18_7 IPP 74H

Dr Pi Fed Unit 17_8 DA 24H

Dr Pi Unit 103H

Dr Pi Fed Unit 17_8 DA 43H

Dr Pi Fed Unit 17_8 DA 44H

Dr Pi Unit 104H

Dr Pi Fed Unit 17_8 DA 73H

Dr Pi Fed Unit 17_8 DA 74H

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1. GENERAL PROVISIONS

The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on the location during construction, drilling and reclamation activity. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the operator, or any person working on the operator's behalf, on the public or federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area (within 100ft) of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer, in conjunction with a BLM Cultural Resource Specialist, to determine appropriate actions to prevent the loss of significant scientific values. The operator shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

Traditional Cultural Properties (TCPs) are protected by NHPA as codified in 36 CFR 800 for possessing traditional, religious, and cultural significance tied to a certain group of individuals. Though there are currently no designated TCPs within the project area or within a mile of the project area, but it is possible for a TCP to be designated after the approval of this project. If a TCP is designated in the project area after the project's approval, the BLM Authorized Officer will notify the operator of the following conditions and the duration for which these conditions are required.

- 1. Temporary halting of all construction, drilling, and production activities to lower noise.
- 2. Temporary shut-off of all artificial lights at night.

The operator is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA), specifically NAGPRA Subpart B regarding discoveries, to protect human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered during project work. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and a BLM-CFO Authorized Officer will be notified immediately. The BLM will then be required to be notified, in writing, within 24 hours of the discovery. The written notification should include the geographic location by county and state, the contents of the discovery, and the steps taken to protect said discovery. You must also include any potential threats to the discovery and a conformation that all activity within 100ft of the discovery has ceased and work will not resume until written certification is issued. All work on the entire project must halt for a minimum of 3 days and work cannot resume until an Authorized Officer grants permission to do so.

Any paleontological resource discovered by the operator, or any person working on the operator's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The operator will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

1.2. RANGELAND RESOURCES

1.2.1. Cattleguards

Where a permanent cattleguard is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

1.2.2. Fence Requirement

Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

1.2.3. Livestock Watering Requirement

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

1.3. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA, New Mexico Department of Agriculture, and BLM requirements and policies.

1.3.1 African Rue (Peganum harmala)

Spraying: The spraying of African Rue must be completed by a licensed or certified applicator. In order to attempt to kill or remove African Rue the proper mix of chemical is needed. The mix consists of 2% Arsenal (Imazapyr) and 2% Roundup (Glyphosate) along with a nonionic surfactant. Any other chemicals or combinations shall be approved by the BLM Noxious Weeds Coordinator prior to treatment. African Rue shall be sprayed in connection to any dirt working activities or disturbances to the site being sprayed. Spraying of African Rue shall be done on immature plants at initial growth through flowering and mature plants between budding and flowering stages. Spraying shall not be conducted after flowering when plant is fruiting. This will ensure optimal intake of chemical and decrease chances of developing herbicide resistance. After spraying, the operator or necessary parties must contact the Carlsbad Field Office to inspect the effectiveness of the application treatment to the plant species. No ground disturbing activities can take place until the inspection by the authorized officer is complete. The operator may contact the Environmental Protection Department or the BLM Noxious Weed Coordinator at (575) 234-5972 or BLM_NM_CFO_NoxiousWeeds@blm.gov.

Management Practices: In addition to spraying for African Rue, good management practices should be followed. All equipment should be washed off using a power washer in a designated containment area. The containment area shall be berned to allow for containment of the seed to prevent it from entering any open areas of the nearby landscape. The containment area shall be excavated near or adjacent to the well pad at a depth of three feet and just large enough to get equipment inside it to be washed off. This will allow all seeds to be in a centrally located area that can be treated at a later date if the need arises.

1.4. LIGHT POLLUTION

1.4.1. **Downfacing**

All permanent lighting will be pointed straight down at the ground in order to prevent light spill beyond the edge of approved surface disturbance.

1.4.2. Shielding

All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source).

1.4.3. Lighting Color

Lighting shall be 3,500 Kelvin or less (Warm White) except during drilling, completion, and workover operations. No bluish-white lighting shall be used in permanent outdoor lighting.

2. SPECIAL REQUIREMENTS

2.1 WILDLIFE

2.1.1 Lesser Prairie Chicken

2.1.1.1 Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

2.1.1.2 Timing Limitation Exceptions:

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

2.1.1.3 Ground-level Abandoned Well Marker to avoid raptor perching:

Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at BLM_NM_CFO_Construction_Reclamation@blm.gov.

3. CONSTRUCTION REQUIRENMENTS

3.1 CONSTRUCTION NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at BLM_NM_CFO_Construction_Reclamation@blm.gov at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and COAs on the well site and they shall be made available upon request by the Authorized Officer.

3.2 TOPSOIL

The operator shall strip the topsoil (the A horizon) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. No more than the top 6 inches of topsoil shall be removed. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (the B horizon and below) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

3.3 CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No reserve pits will be used for drill cuttings. The operator shall properly dispose of drilling contents at an authorized disposal site.

3.4 FEDERAL MINERAL PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

3.5 WELL PAD & SURFACING

Any surfacing material used to surface the well pad will be removed at the time of interim and final reclamation.

3.6 EXCLOSURE FENCING (CELLARS & PITS)

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the well cellar is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

The operator will also install and maintain mesh netting for all open well cellars to prevent access to smaller wildlife before and after drilling operations until the well cellar is free of fluids and the operator. Use a maximum netting mesh size of 1 ½ inches. The netting must not have holes or gaps.

3.7 ON LEASE ACESS ROAD

3.7.1 Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

3.7.2 **Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements will be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

3.7.3 **Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

3.7.4 **Ditching**

Ditching shall be required on both sides of the road.

3.7.5 Turnouts

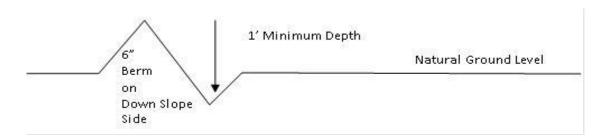
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

3.7.6 **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, leadoff ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:
$$\underline{400'} + 100' = 200'$$
 lead-off ditch interval

3.7.7 **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road
- 4. Revegetate slopes

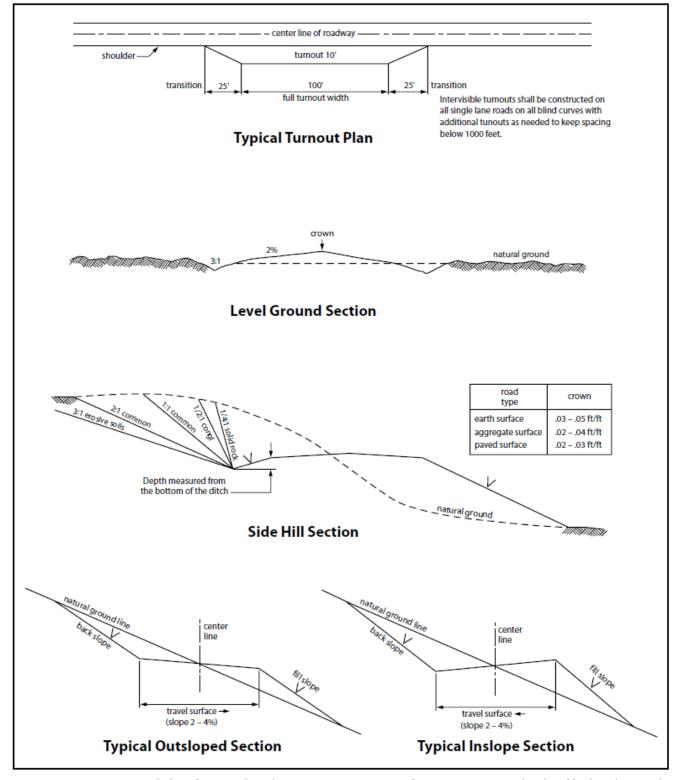


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

4. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- A leak detection plan <u>will be submitted to the BLM Carlsbad Field Office for approval</u> prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.1 BURIED PIPELINES

A copy of the application (APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The Operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. The Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the pipeline corridor or on facilities authorized under this APD. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Pipeline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant is discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of operator, regardless of fault. Upon failure of operator to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and

- fish and wildlife habitats, at the full expense of the operator. Such action by the Authorized Officer shall not relieve operator of any responsibility as provided herein.
- 5. All construction and maintenance activity will be confined to the authorized pipeline corridor.
- 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.
- 7. The maximum allowable disturbance for construction in this pipeline corridor will be 30 feet:
 - Blading of vegetation within the pipeline corridor will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation*.)
 - Clearing of brush species within the pipeline corridor will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
 - The remaining area of the pipeline corridor (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)
- 8. The operator shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6__ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.
- 9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this pipeline corridor and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire pipeline corridor shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted, and a 6-inch berm will be left over the ditch line to allow for settling back to grade.
- 10. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 11. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator before maintenance begins. The operator will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the operator to construct temporary deterrence structures.
- 12. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 13. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30-degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.

4.2 SURFACE PIPELINES

A copy of the APD and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. Operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 et seq. (1982) with regard to any toxic substances that are used, generated by or stored on the pipeline corridoror on facilities authorized under this APD (see 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. Operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Pipeline corridor (unless the release or threatened release is wholly unrelated to activity of the Operator's activity on the Pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This provision applies without regard to whether a release is caused by Operator, its agent, or unrelated third parties.
- 4. Operator shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Operator shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the pipeline corridor or permit area:
 - a. Activities of Operator including, but not limited to: construction, operation, maintenance, and termination of the facility;
 - b. Activities of other parties including, but not limited to:
 - (1) Land clearing
 - (2) Earth-disturbing and earth-moving work
 - (3) Blasting
 - (4) Vandalism and sabotage
 - Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000)

for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

- 5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant is discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Operator, regardless of fault. Upon failure of Operator to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as they deem necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Operator. Such action by the Authorized Officer shall not relieve Operator of any responsibility as provided herein.
- 6. All construction and maintenance activity shall be confined to the authorized pipeline corridor width of 30-feet. If the pipeline route follows an existing road or buried pipeline corridor, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline corridor. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or pipeline corridors.
- 7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.
- 8. Operator shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.
- 9. The pipeline shall be buried with a minimum of 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the operator will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the operator to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" Shale Green, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

- 14. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator. The operator will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
- 15. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 16. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

4.3 OVERHEAD ELECTRIC LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. The operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the powerline corridor or on facilities authorized under this powerline corridor. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Powerline corridor(unless the release or threatened release is wholly unrelated to the operator's activity on the powerline corridor), or resulting from the activity of the Operator on the powerline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the powerline corridor unless otherwise agreed to in writing by the Authorized Officer.
- 5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The operator shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this powerline corridor, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the operator without liability or expense to the United States.

- 6. Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.
- 7. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 8. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 9. Upon cancellation, relinquishment, or expiration of this APD, the operator shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 10. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this APD, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

11. Special Stipulations:

• For reclamation remove poles, lines, transformer, etc. and dispose of properly. Fill in any holes from the poles removed.

4.4 RANGLAND MITIGATION FOR PIPELINES

4.5.1 Fence Requirement

Where entry is granted across a fence line, the fence must be braced and tied off on both sides of the passageway with H-braces prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment operator prior to crossing any fence(s).

4.5.2 Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at road-fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

4.5.3 Livestock Watering Requirement

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment operator if any damage occurs to structures that provide water to livestock.

- Livestock operators will be contacted, and adequate crossing facilities will be provided as needed to ensure livestock are not prevented from reaching water sources because of the open trench.
- Wildlife and livestock trails will remain open and passable by adding soft plugs (areas where the
 trench is excavated and replaced with minimal compaction) during the construction phase. Soft
 plugs with ramps on either side will be left at all well-defined livestock and wildlife trails along

the open trench to allow passage across the trench and provide a means of escape for livestock and wildlife that may enter the trench.

Trenches will be backfilled as soon as feasible to minimize the amount of open trench. The
Operator will avoid leaving trenches open overnight to the extent possible and open trenches that
cannot be backfilled immediately will have escape ramps (wooden) placed at no more than 2,500
feet intervals and sloped no more than 45 degrees.

5. PRODUCTION (POST DRILLING)

5.1 WELL STRUCTURES & FACILITIES

5.1.1 Placement of Production Facilities

Production facilities must be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

5.1.2 Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1½ inches.

5.1.4. Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

5.1.5. Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

6. RECLAMATION

Stipulations required by the Authorized Officer on specific actions may differ from the following general guidelines

6.1 ROAD AND SITE RECLAMATION

Any roads constructed during the life of the well will have the caliche removed or linear burial. If contaminants are indicated then testing will be required for chlorides and applicable contaminate anomalies for final disposal determination (disposed of in a manner approved by the Authorized Officer within Federal, State and Local statutes, regulations, and ordinances) and seeded to the specifications in sections 6.5 and 6.6.

6.2 EROSION CONTROL

Install erosion control berms, windrows, and hummocks. Windrows must be level and constructed perpendicular to down-slope drainage; steeper slopes will require greater windrow density. Topsoil between windrows must be ripped to a depth of at least 12", unless bedrock is encountered. Any large boulders pulled up during ripping must be deep-buried on location. Ripping must be perpendicular to down-slope. The surface must be left rough in order to catch and contain rainfall on-site. Any trenches resulting from erosion cause by run-off shall be addressed immediately.

6.3 INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations must undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators must work with BLM surface protection specialists (BLM_NM_CFO_Construction_Reclamation@blm.gov) to devise the best strategies to reduce the size of the location. Interim reclamation must allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche and any other surface material is required. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided in section 6.6.

Upon completion of interim reclamation, the operator shall submit a Sundry Notice, Subsequent Report of Reclamation (Form 3160-5).

6.4 FINAL ABANDONMENT & RECLAMATION

Prior to surface abandonment, the operator shall submit a Notice of Intent Sundry Notice and reclamation plan.

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding will be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM. After earthwork and seeding is completed, the operator is required to submit a Sundry Notice, Subsequent Report of Reclamation.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (BLM_NM_CFO_Construction_Reclamation@blm.gov).

6.5 SEEDING TECHNIQUES

Seeds shall be hydro-seeded, mechanically drilled, or broadcast, with the broadcast-seeded area raked, ripped or dragged to aid in covering the seed. The seed mixture shall be evenly and uniformly planted over the disturbed area.

6.6 SOIL SPECIFIC SEED MIXTURE

The lessee/permitee shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed land application will be accomplished by mechanical planting using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds tend to drop the bottom of the drill and are planted first; the operator shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory BLM or Soil Conservation

District stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding or until several months of precipitation have occurred, enabling a full four months of growth, with one or more seed generations being established.

Seed Mixture #5 for LPC Sand/Shinnery Sites

Species to be planted in pounds of pure live seed* per acre:

Species	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	11bs/A

^{*}Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

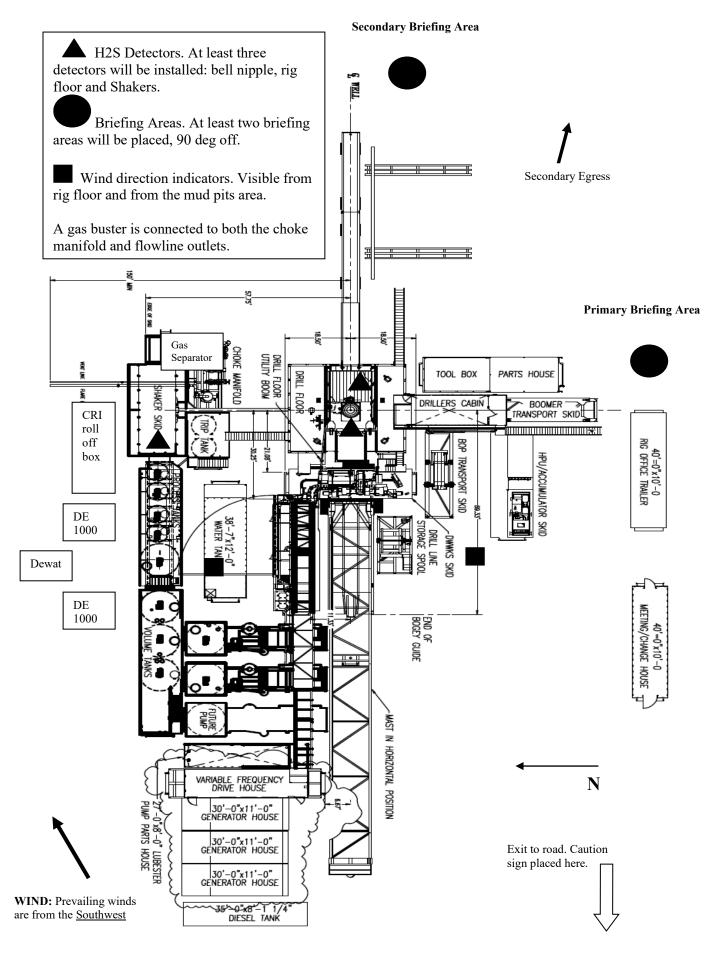


Permian Drilling Hydrogen Sulfide Drilling Operations Plan

Open drill site. No homes or buildings are near the proposed location.

1. Escape

Personnel shall escape upwind of wellbore in the event of an emergency gas release. Escape can take place through the lease road on the Southeast side of the location. Personnel need to move to a safe distance and block the entrance to location. If the primary route is not an option due to the wind direction, then a secondary egress route should be taken.





Permian Drilling Hydrogen Sulfide Drilling Operations Plan New Mexico

Scope

This contingency plan establishes guidelines for the public, all company employees, and contract employees who's work activities may involve exposure to hydrogen sulfide (H2S) gas.

While drilling this well, it is possible to encounter H2S bearing formations. At all times, the first barrier to control H2S emissions will be the drilling fluid, which will have a density high enough to control influx.

Objective

- 1. Provide an immediate and predetermined response plan to any condition when H2S is detected. All H2S detections in excess of 10 parts per million (ppm) concentration are considered an Emergency.
- 2. Prevent any and all accidents, and prevent the uncontrolled release of hydrogen sulfide into the atmosphere.
- 3. Provide proper evacuation procedures to cope with emergencies.
- 4. Provide immediate and adequate medical attention should an injury occur.

Discussion

Implementation: This plan with all details is to be fully implemented

before drilling to commence.

Emergency response

Procedure:

This section outlines the conditions and denotes steps

to be taken in the event of an emergency.

Emergency equipment

Procedure:

This section outlines the safety and emergency

equipment that will be required for the drilling of this

well.

Training provisions: This section outlines the training provisions that

must be adhered to prior to drilling.

Drilling emergency call lists: Included are the telephone numbers of all persons to

be contacted should an emergency exist.

Briefing: This section deals with the briefing of all people

involved in the drilling operation.

Public safety: Public safety personnel will be made aware of any

potential evacuation and any additional support

needed.

Check lists: Status check lists and procedural check lists have been

included to insure adherence to the plan.

General information: A general information section has been included to

supply support information.

Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on the well:

- 1. The hazards and characteristics of H2S.
- 2. Proper use and maintenance of personal protective equipment and life support systems.
- 3. H2S detection.
- 4. Proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
- 5. Proper techniques for first aid and rescue procedures.
- 6. Physical effects of hydrogen sulfide on the human body.
- 7. Toxicity of hydrogen sulfide and sulfur dioxide.
- 8. Use of SCBA and supplied air equipment.
- 9. First aid and artificial respiration.
- 10. Emergency rescue.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile strength tubular is to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling a well, blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan.

H2S training refresher must have been taken within one year prior to drilling the well. Specifics on the well to be drilled will be discussed during the pre-spud meeting. H2S and well control (choke) drills will be performed while drilling the well, at least on a weekly basis. This plan shall be available in the well site. All personnel will be required to carry the documentation proving that the H2S training has been taken.

Service company and visiting personnel

- A. Each service company that will be on this well will be notified if the zone contains H2S.
- B. Each service company must provide for the training and equipment of their employees before they arrive at the well site.
- C. Each service company will be expected to attend a well site

Emergency Equipment Requirements

1. Well control equipment

The well shall have hydraulic BOP equipment for the anticipated pressures. Equipment is to be tested on installation and follow Oxy Well Control standard, as well as 43 CFR part 3170 Subpart 3172.

Special control equipment:

- A. Hydraulic BOP equipment with remote control on ground. Remotely operated choke.
- B. Rotating head
- C. Gas buster equipment shall be installed before drilling out of surface pipe.

2. <u>Protective equipment for personnel</u>

- A. Four (4) 30-minute positive pressure air packs (2 at each briefing area) on location.
- B. Adequate fire extinguishers shall be located at strategic locations.
- C. Radio / cell telephone communication will be available at the rig.
 - Rig floor and trailers.
 - Vehicle.

3. Hydrogen sulfide sensors and alarms

- A. H2S sensor with alarms will be located on the rig floor, at the bell nipple, and at the flow line. These monitors will be set to alarm at 10 ppm with strobe light, and audible alarm.
- B. Hand operated detectors with tubes.
- C. H2S monitor tester (to be provided by contract Safety Company.)
- D. There shall be one combustible gas detector on location at all times.

4. <u>Visual Warning Systems</u>

A. One sign located at each location entrance with the following language:

Caution – potential poison gas Hydrogen sulfide No admittance without authorization

Wind sock – wind streamers:

- A. One 36" (in length) wind sock located at protection center, at height visible from rig floor.
- B. One 36" (in length) wind sock located at height visible from pit areas.

Condition flags

A. One each condition flag to be displayed to denote conditions.

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green – normal conditions
yellow – potential danger
red – danger, H2S present
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B. Condition flag shall be posted at each location sign entrance.

5. <u>Mud Program</u>

The mud program is designed to minimize the risk of having H2S and other formation fluids at surface. Proper mud weight and safe drilling practices will be applied. H2S scavengers will be used to minimize the hazards while drilling. Below is a summary of the drilling program.

Mud inspection devices:

Garrett gas train or hatch tester for inspection of sulfide concentration in mud system.

6. <u>Metallurgy</u>

- A. Drill string, casing, tubing, wellhead, blowout preventers, drilling spools or adapters, kill lines, choke manifold, lines and valves shall be suitable for the H2S service.
- B. All the elastomers, packing, seals and ring gaskets shall be suitable for H2S service.

7. Well Testing

No drill stem test will be performed on this well.

8. Evacuation plan

Evacuation routes should be established prior to well spud for each well and discussed with all rig personnel.

9. <u>Designated area</u>

- A. Parking and visitor area: all vehicles are to be parked at a predetermined safe distance from the wellhead.
- B. There will be a designated smoking area.
- C. Two briefing areas on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds perpendicularly, or at a 45-degree angle if wind direction tends to shift in the area.

Emergency procedures

- A. In the event of any evidence of H2S level above 10 ppm, take the following steps:
 - 1. The Driller will pick up off bottom, shut down the pumps, slow down the pipe rotation.
 - 2. Secure and don escape breathing equipment, report to the upwind designated safe briefing / muster area.
 - 3. All personnel on location will be accounted for and emergency search should begin for any missing, the Buddy System will be implemented.
 - 4. Order non-essential personnel to leave the well site, order all essential personnel out of the danger zone and upwind to the nearest designated safe briefing / muster area.
 - 5. Entrance to the location will be secured to a higher level than our usual "Meet and Greet" requirement, and the proper condition flag will be displayed at the entrance to the location.
 - 6. Take steps to determine if the H2S level can be corrected or suppressed and, if so, proceed as required.

B. If uncontrollable conditions occur:

1. Take steps to protect and/or remove any public in the down-wind area from the rig – partial evacuation and isolation. Notify necessary public safety personnel and appropriate regulatory entities (i.e. BLM) of the situation.

- 2. Remove all personnel to the nearest upwind designated safe briefing / muster area or off location.
- 3. Notify public safety personnel of safe briefing / muster area.
- 4. An assigned crew member will blockade the entrance to the location. No unauthorized personnel will be allowed entry to the location.
- 5. Proceed with best plan (at the time) to regain control of the well. Maintain tight security and safety procedures.

C. Responsibility:

- 1. Designated personnel.
 - a. Shall be responsible for the total implementation of this plan.
 - b. Shall be in complete command during any emergency.
 - c. Shall designate a back-up.

All personnel:

- 1. On alarm, don escape unit and report to the nearest upwind designated safe briefing / muster area upw
- 2. Check status of personnel (buddy system).
- 3. Secure breathing equipment.
- 4. Await orders from supervisor.

Drill site manager:

- 1. Don escape unit if necessary and report to nearest upwind designated safe briefing / muster area.
- 2. Coordinate preparations of individuals to return to point of release with tool pusher and driller (using the buddy system).
- 3. Determine H2S concentrations.
- 4. Assess situation and take control measures.

Tool pusher:

- 1. Don escape unit Report to up nearest upwind designated safe briefing / muster area.
- 2. Coordinate preparation of individuals to return to point of release with tool pusher drill site manager (using the buddy system).
- 3. Determine H2S concentration.
- 4. Assess situation and take control measures.

Driller:

1. Don escape unit, shut down pumps, continue

rotating DP.

- 2. Check monitor for point of release.
- 3. Report to nearest upwind designated safe briefing / muster area.
- 4. Check status of personnel (in an attempt to rescue, use the buddy system).
- 5. Assigns least essential person to notify Drill Site Manager and tool pusher by quickest means in case of their absence.
- 6. Assumes the responsibilities of the Drill Site Manager and tool pusher until they arrive should they be absent.

Derrick man Floor man #1 Floor man #2 1. Will remain in briefing / muster area until instructed by supervisor.

Mud engineer:

- Report to nearest upwind designated safe briefing / muster area.
- 2. When instructed, begin check of mud for ph and H2S level. (Garett gas train.)

Safety personnel:

1. Mask up and check status of all personnel and secure operations as instructed by drill site manager.

Taking a kick

When taking a kick during an H2S emergency, all personnel will follow standard Well control procedures after reporting to briefing area and masking up.

Open-hole logging

All unnecessary personnel off floor. Drill Site Manager and safety personnel should monitor condition, advise status and determine need for use of air equipment.

Running casing or plugging

Following the same "tripping" procedure as above. Drill Site Manager and safety personnel should determine if all personnel have access to protective equipment.

Ignition procedures

The decision to ignite the well is the responsibility of the operator (Oxy Drilling Management). The decision should be made only as a last resort and in a situation where it is clear that:

- 1. Human life and property are endangered.
- 2. There is no hope controlling the blowout under the prevailing conditions at the well.

<u>Instructions for igniting the well</u>

- 1. Two people are required for the actual igniting operation. They must wear self-contained breathing units and have a safety rope attached. One man (tool pusher or safety engineer) will check the atmosphere for explosive gases with the gas monitor. The other man is responsible for igniting the well.
- 2. Primary method to ignite: 25 mm flare gun with range of approximately 500 feet.
- 3. Ignite upwind and do not approach any closer than is warranted.
- 4. Select the ignition site best for protection, and which offers an easy escape route.
- 5. Before firing, check for presence of combustible gas.
- 6. After lighting, continue emergency action and procedure as before.
- 7. All unassigned personnel will remain in briefing area until instructed by supervisor or directed by the Drill Site Manager.

<u>Remember</u>: After well is ignited, burning hydrogen sulfide will convert to sulfur dioxide, which is also highly toxic. <u>Do not assume the area is safe after the well is ignited.</u>

Status check list

Note: All items on this list must be completed before drilling to production casing point.

- 1. H2S sign at location entrance.
- 2. Two (2) wind socks located as required.
- 3. Four (4) 30-minute positive pressure air packs (2 at each Briefing area) on location for all rig personnel and mud loggers.
- 4. Air packs inspected and ready for use.
- 5. Cascade system and hose line hook-up as needed.
- 6. Cascade system for refilling air bottles as needed.
- 7. Condition flag on location and ready for use.
- 8. H2S detection system hooked up and tested.
- 9. H2S alarm system hooked up and tested.
- 10. Hand operated H2S detector with tubes on location.
- 11. 1-100' length of nylon rope on location.
- 12. All rig crew and supervisors trained as required.
- 13. All outside service contractors advised of potential H2S hazard on well.
- 14. No smoking sign posted and a designated smoking area identified.
- 15. Calibration of all H2S equipment shall be noted on the IADC report.

Checked by:	Date:
encerca oy.	Bate.

Procedural check list during H2S events

Perform each tour:

- 1. Check fire extinguishers to see that they have the proper charge.
- 2. Check breathing equipment to ensure that it in proper working order.
- 3. Make sure all the H2S detection system is operative.

Perform each week:

- 1. Check each piece of breathing equipment to make sure that demand or forced air regulator is working. This requires that the bottle be opened and the mask assembly be put on tight enough so that when you inhale, you receive air or feel air flow.
- 2. BOP skills (well control drills).
- 3. Check supply pressure on BOP accumulator stand by source.
- 4. Check breathing equipment mask assembly to see that straps are loosened and turned back, ready to put on.
- 5. Check pressure on breathing equipment air bottles to make sure they are charged to full volume. (Air quality checked for proper air grade "D" before bringing to location)
- 6. Confirm pressure on all supply air bottles.
- 7. Perform breathing equipment drills with on-site personnel.
- 8. Check the following supplies for availability.
 - A. Emergency telephone list.
 - B. Hand operated H2S detectors and tubes.

General evacuation plan

- 1. When the company approved supervisor (Drill Site Manager, consultant, rig pusher, or driller) determines the H2S gas cannot be limited to the well location and the public will be involved, he will activate the evacuation plan.
- 2. Drill Site Manager or designee will notify local government agency that a hazardous condition exists and evacuation needs to be implemented.
- 3. Company or contractor safety personnel that have been trained in the use of H2S detection equipment and self-contained breathing equipment will monitor H2S concentrations, wind directions, and area of exposure. They will delineate the outer perimeter of the hazardous gas area. Extension to the evacuation area will be determined from information gathered.
- 4. Law enforcement personnel (state police, police dept., fire dept., and sheriff's dept.) Will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.
- 5. After the discharge of gas has been controlled, company safety personnel will determine when the area is safe for re-entry.

<u>Important:</u> Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

Emergency actions

Well blowout – if emergency

- 1. Evacuate all personnel to "Safe Briefing / Muster Areas" or off location if needed.
- 2. If sour gas evacuate rig personnel.
- 3. If sour gas evacuate public within 3000 ft radius of exposure.
- 4. Don SCBA and shut well in if possible using the buddy system.
- 5. Notify Drilling Superintendent and call 911 for emergency help (fire dept and ambulance) if needed.
- 6. Implement the Blowout Contingency Plan, and Drilling Emergency Action Plan.
- 6. Give first aid as needed.

Person down location/facility

- 1. If immediately possible, contact 911. Give location and wait for confirmation.
- 2. Don SCBA and perform rescue operation using buddy system.

Toxic effects of hydrogen sulfide

Hydrogen sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 ppm, which is .001% by volume. Hydrogen sulfide is heavier than air (specific gravity – 1.192) and colorless. It forms an explosive mixture with air between 4.3 and 46.0 percent by volume. Hydrogen sulfide is almost as toxic as hydrogen cyanide and is between five and six times more toxic than carbon monoxide. Toxicity data for hydrogen sulfide and various other gases are compared in table i. Physical effects at various hydrogen sulfide exposure levels are shown in table ii.

Table i Toxicity of various gases

Common name	Chemical formula	Specific gravity (sc=1)	Threshold limit (1)	Hazardous limit (2)	Lethal concentration (3)
Hydrogen Cyanide	Hen	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H2S	1.18	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	So2	2.21	5 ppm	-	1000 ppm
Chlorine	C12	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	Co	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	Co2	1.52	5000 ppm	5%	10%
Methane	Ch4	0.55	90,000 ppm	Combustib	le above 5% in air

- 1) threshold limit concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects.
- 2) hazardous limit concentration that will cause death with short-term exposure.
- 3) lethal concentration concentration that will cause death with short-term exposure.

Toxic effects of hydrogen sulfide

Table ii
Physical effects of hydrogen sulfide

		Concentration	Physical effects
Percent (%)	Ppm	Grains	
, ,	-	100 std. Ft3*	
0.001	<10	00.65	Obvious and unpleasant odor.

0.002	10	01.30	Safe for 8 hours of exposure.
0.010	100	06.48	Kill smell in $3 - 15$ minutes. May sting eyes and throat.
0.020	200	12.96	Kills smell shortly; stings eyes and throat.
0.050	500	32.96	Dizziness; breathing ceases in a few minutes; needs prompt artificial respiration.
0.070	700	45.36	Unconscious quickly; death will result if not rescued promptly.
0.100	1000	64.30	Unconscious at once; followed by death within minutes.

^{*}at 15.00 psia and 60'f.

Use of self-contained breathing equipment (SCBA)

- 1. Written procedures shall be prepared covering safe use of SCBA's in dangerous atmosphere, which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available SCBA.
- 2 SCBA's shall be inspected frequently at random to insure that they are properly used, cleaned, and maintained.
- 3. Anyone who may use the SCBA's shall be trained in how to insure proper facepiece to face seal. They shall wear SCBA's in normal air and then wear them in a
 test atmosphere. (note: such items as facial hair {beard or sideburns} and
 eyeglasses will not allow proper seal.) Anyone that may be reasonably expected
 to wear SCBA's should have these items removed before entering a toxic
 atmosphere. A special mask must be obtained for anyone who must wear
 eyeglasses or contact lenses.
- 4. Maintenance and care of SCBA's:
 - a. A program for maintenance and care of SCBA's shall include the following:
 - 1. Inspection for defects, including leak checks.
 - 2. Cleaning and disinfecting.
 - 3. Repair.
 - 4. Storage.
 - b. Inspection, self-contained breathing apparatus for emergency use shall be inspected monthly.
 - 1. Fully charged cylinders.
 - 2. Regulator and warning device operation.
 - 3. Condition of face piece and connections.
 - 4. Rubber parts shall be maintained to keep them pliable and prevent deterioration.
 - c. Routinely used SCBA's shall be collected, cleaned and disinfected as frequently as necessary to insure proper protection is provided.
- 5. Persons assigned tasks that requires use of self-contained breathing equipment shall be certified physically fit (medically cleared) for breathing equipment usage at least annually.
- 6. SCBA's should be worn when:
 - A. Any employee works near the top or on top of any tank unless test reveals less than 10 ppm of H2S.

- B. When breaking out any line where H2S can reasonably be expected.
- C. When sampling air in areas to determine if toxic concentrations of H2S exists.
- D. When working in areas where over 10 ppm H2S has been detected.
- E. At any time there is a doubt as to the H2S level in the area to be entered.

Rescue First aid for H2S poisoning

Do not panic!

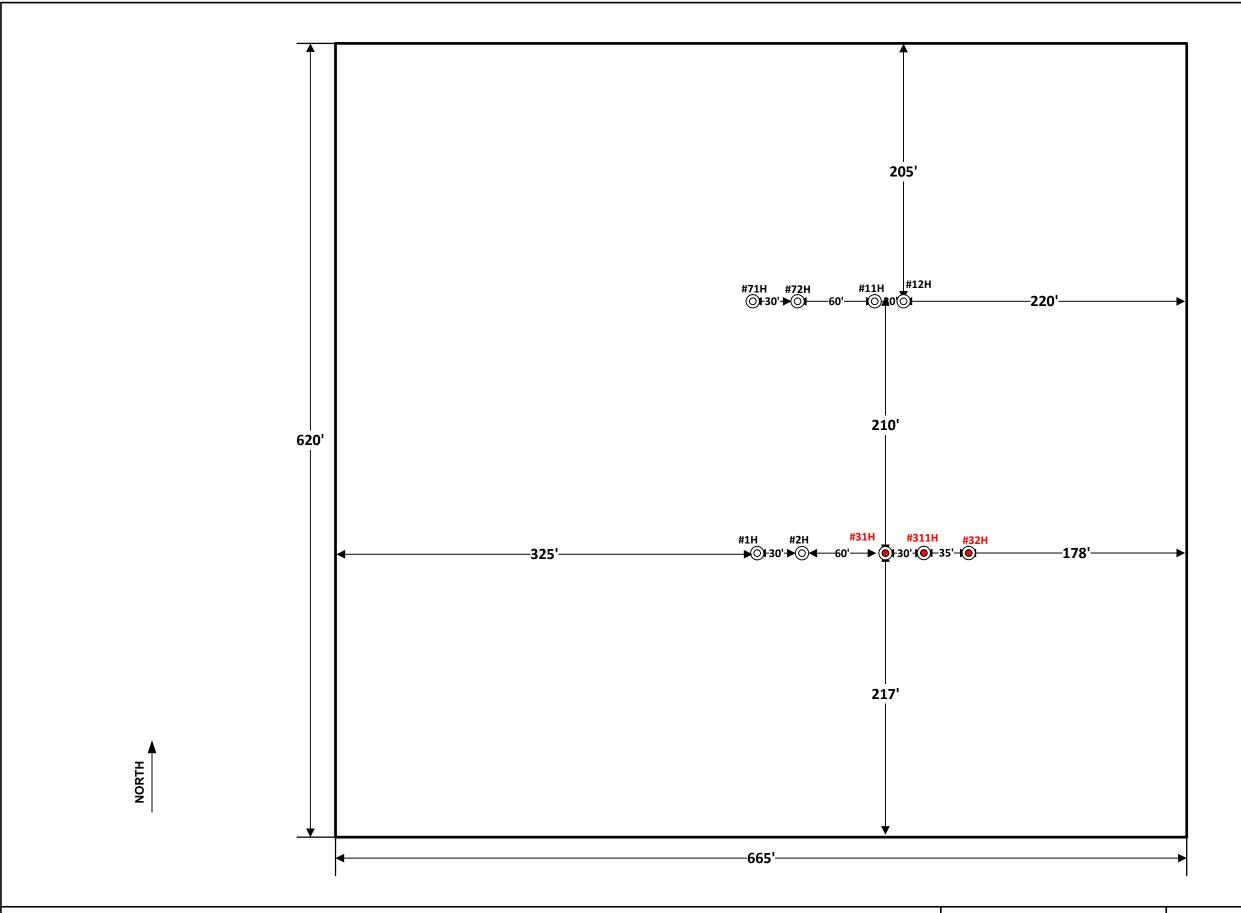
Remain calm – think!

- 1. Don SCBA breathing equipment.
- 2. Remove victim(s) utilizing buddy system to fresh air as quickly as possible. (go up-wind from source or at right angle to the wind. Not down wind.)
- 3. Briefly apply chest pressure arm lift method of artificial respiration to clean the victim's lungs and to avoid inhaling any toxic gas directly from the victim's lungs.
- 4. Provide for prompt transportation to the hospital, and continue giving artificial respiration if needed.
- 5. Hospital(s) or medical facilities need to be informed, before-hand, of the possibility of H2S gas poisoning no matter how remote the possibility is.
- 6. Notify emergency room personnel that the victim(s) has been exposed to H2S gas.

Besides basic first aid, everyone on location should have a good working knowledge of artificial respiration.

Revised CM 6/27/2012

Received by OCD: 12/30/2024 8:20:53 AM



		REVISION BLOCK				ENGINEERII	NG RECORD
NO.	DATE	DESCRIPTION	ву	СНК	АРР	ВҮ	DATE
Releas	ed to Imagin	g: 12/31/2024 9:51:00 AM				куѕ	10/27/2023

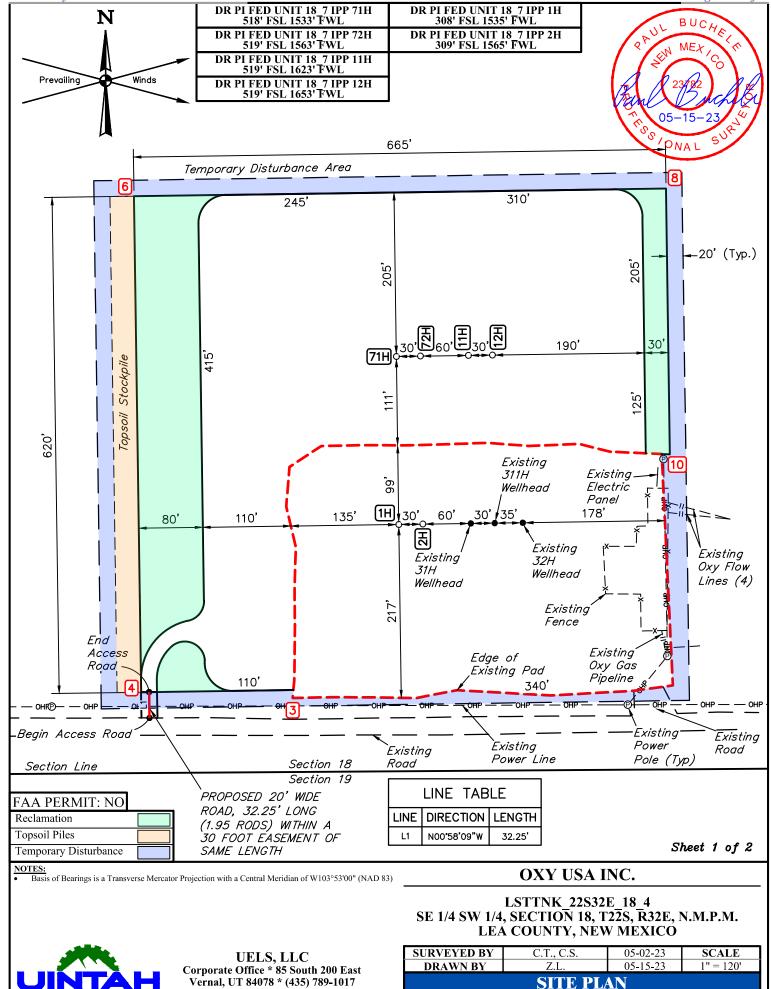
PAD 18_7 RIG DIAGRAM V-DOOR EAST

DR PI FED UNIT 18_7 IPP #71H, 72H, 11H, 12H, 1H, 2H

31H, 311H, 32H (PREVIOUSLY DRILLED)

SECTION 18, TOWNSHIP 22S, RANGE 32E

EDDY COUNTY, NEW MEXICO





71H - EL: 3627.1'	72H - EL: 3627.3'	11H - EL: 3628.9'	12H - EL: 3628.8'
NAD 83	NAD 83	NAD 83	NAD 83
LATITUDE = 32°23'08.49" (32.385691°)	LATITUDE = 32°23'08.49" (32.385692°)	LATITUDE = 32°23'08.50" (32.385694°)	LATITUDE = 32°23'08.50" (32.385695°)
LONGITUDE = -103°43'04.74" (-103.717984°)	LONGITUDE = -103°43'04.39" (-103.717887°)	LONGITUDE = -103°43'03.69" (-103.717692°)	LONGITUDE = -103°43'03.34" (-103.717595°)
NAD 27	NAD 27	NAD 27	NAD 27
LATITUDE = 32°23'08.04" (32.385568°)	LATITUDE = 32°23'08.05" (32.385569°)	LATITUDE = 32°23'08.06" (32.385571°)	LATITUDE = 32°23'08.06" (32.385572°)
LONGITUDE = -103°43'02.98" (-103.717495°)	LONGITUDE = -103°43'02.63" (-103.717398°)	LONGITUDE = -103°43'01.93" (-103.717204°)	LONGITUDE = -103°43'01.58" (-103.717107°)
STATE PLANE NAD 83 (N.M. EAST)			
N: 504592.07' E: 731287.30'	N: 504592.62' E: 731317.29'	N: 504593.73' E: 731377.26'	N: 504594.29' E: 731407.25'
STATE PLANE NAD 27 (N.M. EAST)			
N: 504531.63' E: 690104.93'	N: 504532.19' E: 690134.91'	N: 504533.30' E: 690194.89'	N: 504533.85' E: 690224.88'

2H - EL: 3622.6'	3 - EL: 3622.7'	4 - EL: 3613.8'
NAD 83	NAD 83	NAD 83
LATITUDE = 32°23'06.41" (32.385115°)	LATITUDE = 32°23'04.36" (32.384545°)	LATITUDE = 32°23'04.34" (32.384539°)
LONGITUDE = -103°43'04.36" (-103.717878°)	LONGITUDE = -103°43'06.25" (-103.718314°)	LONGITUDE = -103°43'08.47" (-103.719019°)
NAD 27	NAD 27	NAD 27
LATITUDE = 32°23'05.97" (32.384992°)	LATITUDE = 32°23'03.92" (32.384423°)	LATITUDE = 32°23'03.90" (32.384416°)
LONGITUDE = -103°43'02.60" (-103.717389°)	LONGITUDE = -103°43'04.49" (-103.717914°)	LONGITUDE = -103°43'06.71" (-103.718530°)
STATE PLANE NAD 83 (N.M. EAST)	STATE PLANE NAD 83 (N.M. EAST)	STATE PLANE NAD 83 (N.M. EAST)
N: 504382.70' E: 731321.18'	N: 504174.71' E: 731160.42'	N: 504171.17' E: 730970.19'
STATE PLANE NAD 27 (N.M. EAST)	STATE PLANE NAD 27 (N.M. EAST)	STATE PLANE NAD 27 (N.M. EAST)
N: 504322.27' E: 690138.80'	N: 504114.29' E: 689978.04'	N: 504110.74' E: 689787.81'
	NAD 83 LATITUDE = 32°23'06.41" (32.385115°) LONGITUDE = -103°43'04.36" (-103.717878°) NAD 27 LATITUDE = 32°23'05.97" (32.384992°) LONGITUDE = -103°43'02.60" (-103.717389°) STATE PLANE NAD 83 (N.M. EAST) N: 504382.70' E: 731321.18' STATE PLANE NAD 27 (N.M. EAST)	NAD 83

6 - EL: 3619.5'	8 - EL: 3635.3'	10 - EL: 3625.9'	BEGIN ACCESS ROAD - EL: 3614.6'
NAD 83	NAD 83	NAD 83	NAD 83
LATITUDE = 32°23'10.47" (32.386242°)	LATITUDE = 32°23'10.56" (32.386266°)	LATITUDE = 32°23'07.27" (32.385353°)	LATITUDE = 32°23'04.02" (32.384450°)
LONGITUDE = -103°43'08.56" (-103.719045°)	LONGITUDE = -103°43'00.81" (-103.716891°)	LONGITUDE = -103°43'00.76" (-103.716877°)	LONGITUDE = -103°43'08.35" (-103.718985°)
NAD 27	NAD 27	NAD 27	NAD 27
LATITUDE = 32°23'10.03" (32.386120°)	LATITUDE = 32°23'10.12" (32.386143°)	LATITUDE = 32°23'06.83" (32.385230°)	LATITUDE = 32°23'03.58" (32.384328°)
LONGITUDE = -103°43'06.80" (-103.718556°)	LONGITUDE = -103°42'59.05" (-103.716403°)	LONGITUDE = -103°42'59.00" (-103.716389°)	LONGITUDE = -103°43'06.59" (-103.718497°)
STATE PLANE NAD 83 (N.M. EAST)			
N: 504790.95' E: 730958.65'	N: 504803.33' E: 731623.41'	N: 504471.24' E: 731629.59'	N: 504139.12' E: 730980.74'
STATE PLANE NAD 27 (N.M. EAST)			
N: 504730.51' E: 689776.28'	N: 504742.88' E: 690441.04'	N: 504410.81' E: 690447.22'	N: 504078.69' E: 689798.36'

END ACCESS ROAD - EL: 3615.1'
NAD 83
LATITUDE = 32°23'04.34" (32.384539°)
LONGITUDE = -103°43'08.35" (-103.718987°)
NAD 27
LATITUDE = 32°23'03.90" (32.384416°)
LONGITUDE = -103°43'06.59" (-103.718498°)
STATE PLANE NAD 83 (N.M. EAST)
N: 504171.35' E: 730980.06'
STATE PLANE NAD 27 (N.M. EAST)
N: 504110.93' E: 689797.68'

Sheet 2 of 2

NOTES:

Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

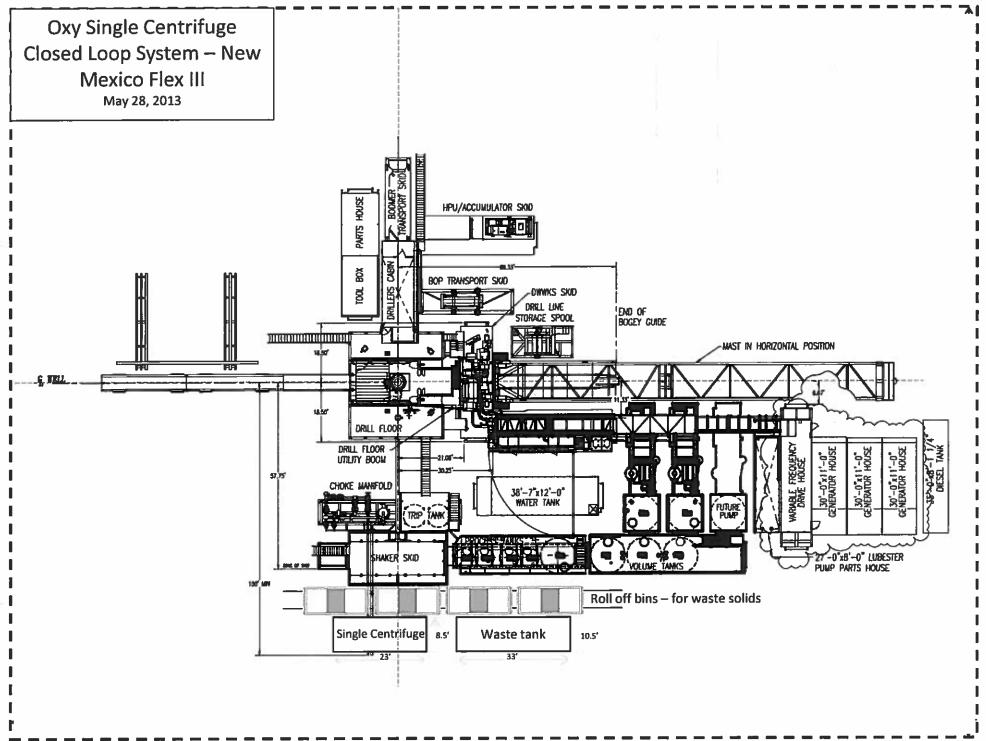
OXY USA INC.

LSTTNK_22S32E_18_4
SE 1/4 SW 1/4, SECTION 18, T22S, R32E, N.M.P.M.
LEA COUNTY, NEW MEXICO

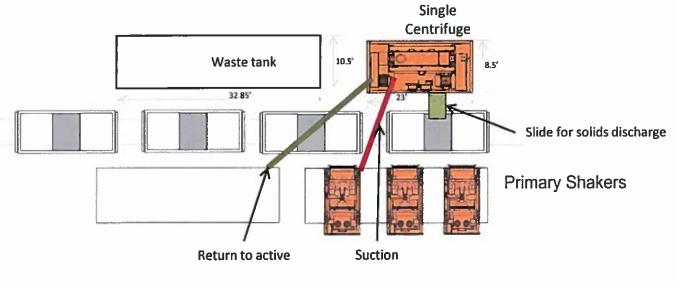


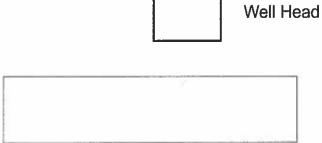
UELS, LLC Corporate Office * 85 South 200 East Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	C.T., C.S.	05-02-23	SCALE
DRAWN BY	Z.L.	05-15-23	N/A
	SITE PLA	AN	



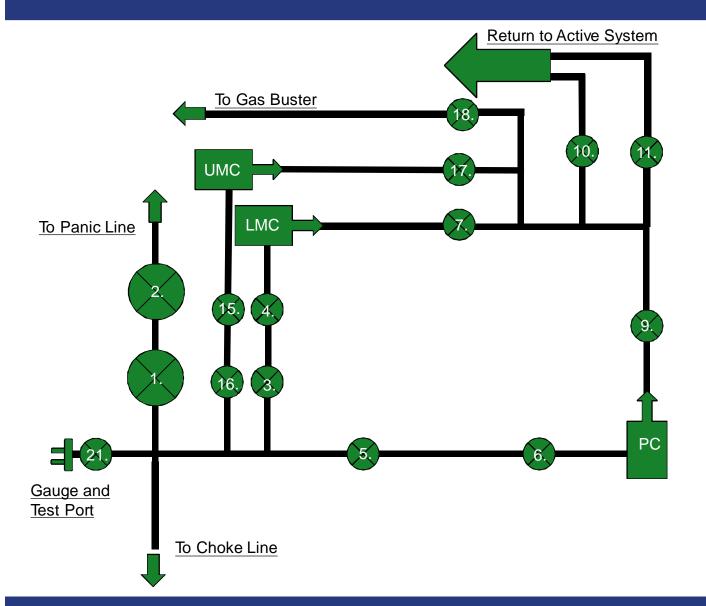






Oxy Single Centrifuge Closed Loop System – New Mexico Flex III May 28, 2013

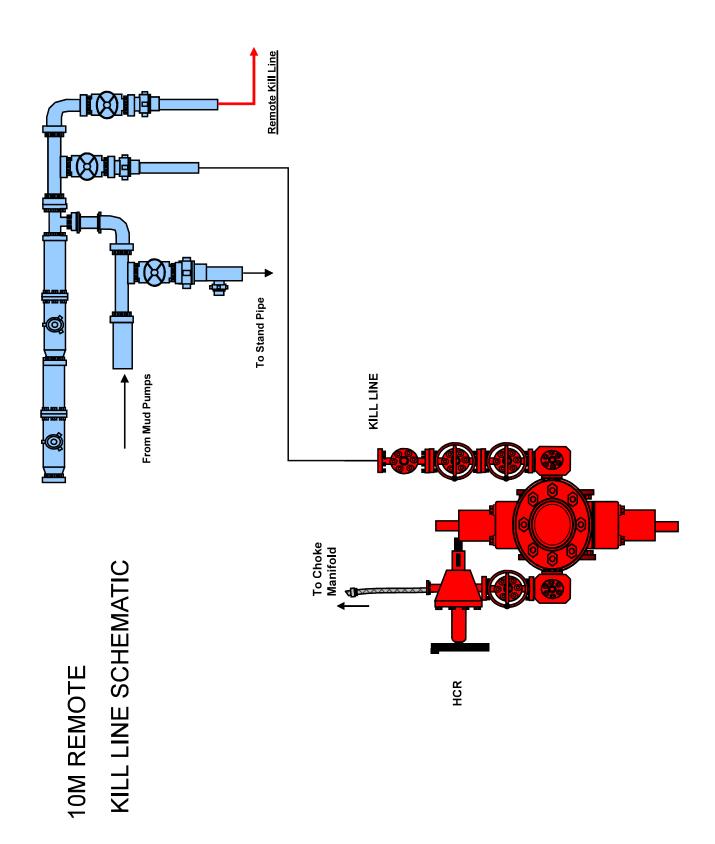
10M Choke Panel

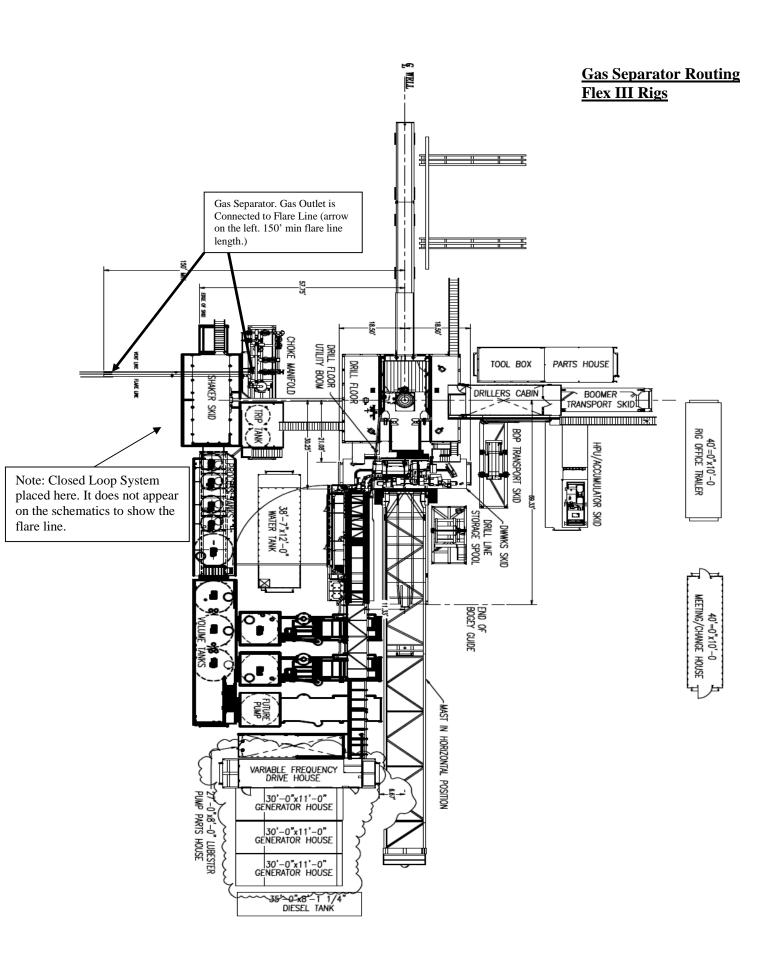


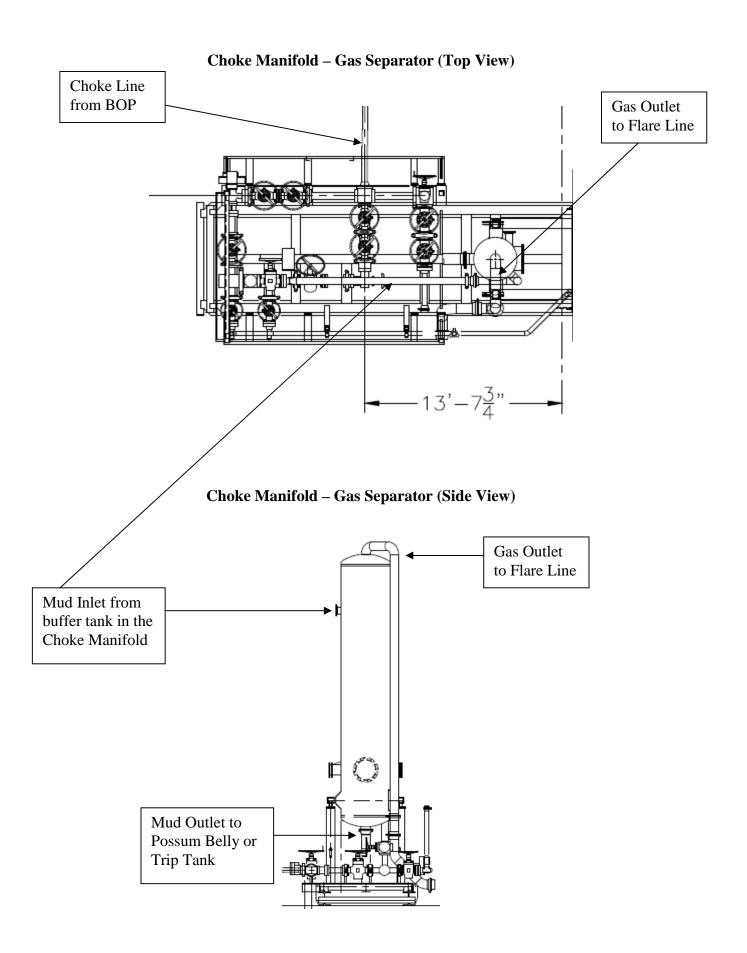
- 1. Choke Manifold Valve
- 2. Choke Manifold Valve
- 3. Choke Manifold Valve
- 4. Choke Manifold Valve
- 5. Choke Manifold Valve
- 6. Choke Manifold Valve
- 7. Choke Manifold Valve
- 8. PC Power Choke
- 9. Choke Manifold Valve
- 10. Choke Manifold Valve
- 11. Choke Manifold Valve
- 12. LMC Lower Manual Choke
- 13. UMC Upper manual choke
- 15. Choke Manifold Valve
- 16. Choke Manifold Valve
- 17. Choke Manifold Valve
- 18. Choke Manifold Valve
- 21. Vertical Choke Manifold Valve

*All Valves 3" minimum

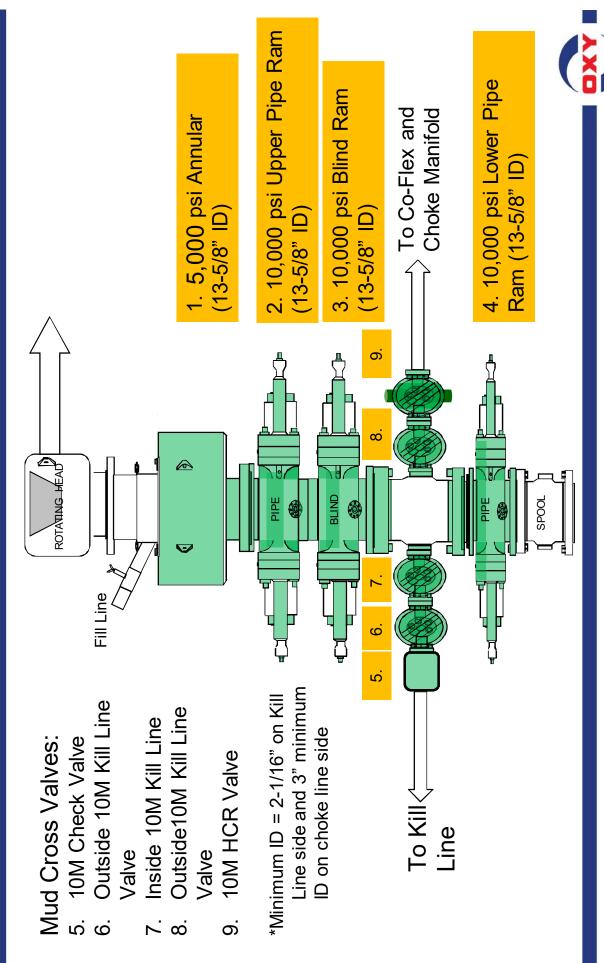


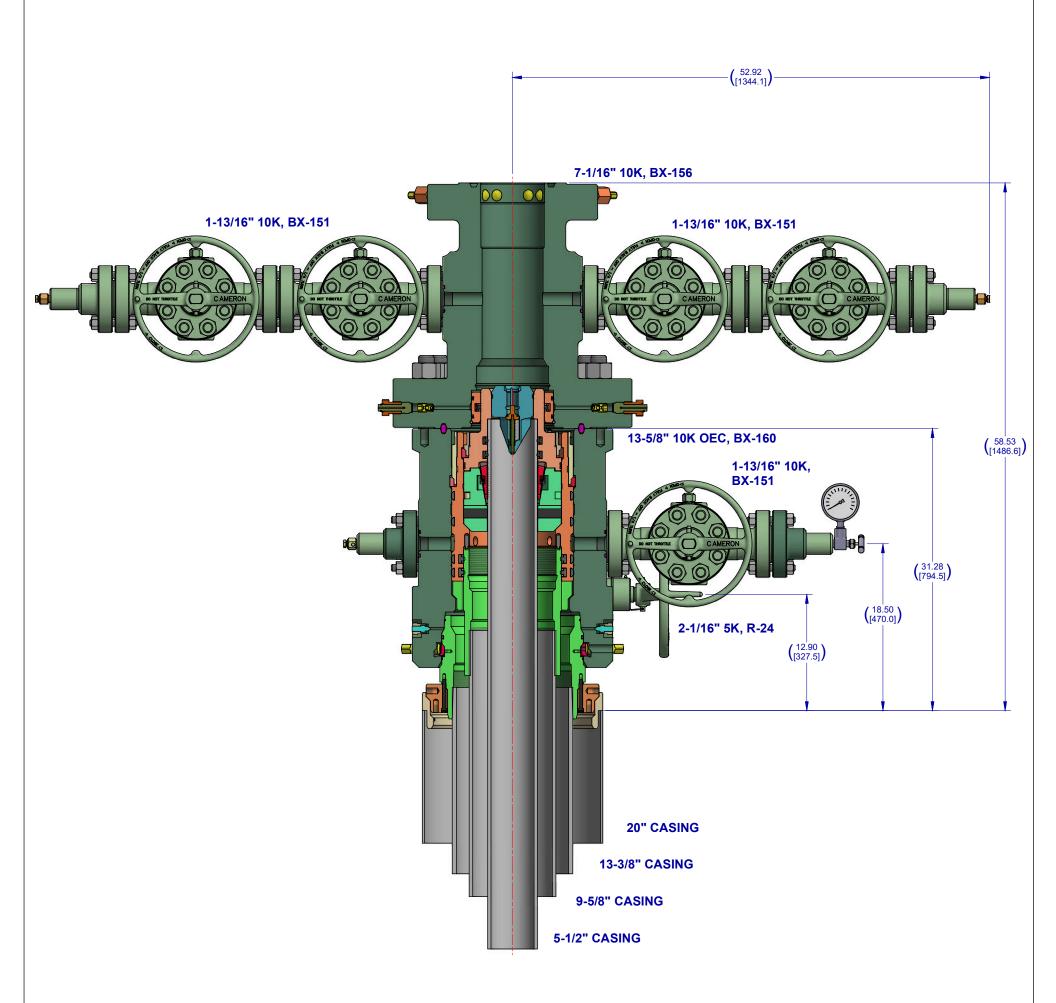






5/10M BOP Stack





Notes:

1. THIS IS A PROPOSAL DRAWING AND DIMENSIONS SHOWN ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PROCESS.

2. DIGITALLY ENABLED SOLUTIONS, CHOKES AND ESD'S AVAILABLE ON REQUEST

	CONFIDENTIAL							
SURFACE TREATMENT	DO NOT SCALE		CAMERON	SURFACE				
	DRAWN BY:	DATE			SYSTEMS			
	D. GOTTUNG	18 Feb 22		A Schlumberger Company	OTOTEMO			
MATERIAL & HEAT TREAT	CHECKED BY:	DATE						
	D. GOTTUNG	18 Feb 22	OXY 13-5/8" 10K ADAPT 16" X 10-3/4" X 7-5/8" X 5-1/2"					
	APPROVED BY:	DATE			X 5-1/2"			
	D. GOTTUNG	18 Feb 22		10 11 014 11 010 1	10 1/2			
	5.068 LBS INITIAL USE B/M: 73.748 KG		SHEET 1 of 1	SD-053434-94-	-12 REV: 01			

Sante Fe Main Office Phone: (505) 476-3441 General Information

Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Action 415663

CONDITIONS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	415663
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
melissaguidry	Cement is required to circulate on both surface and intermediate1 strings of casing.	12/30/2024
melissaguidry	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	12/30/2024
pkautz	Prior to production of this well a change to the well name/number is required to comply with the OCD well naming convention.	12/31/2024
pkautz	File As Drilled C-102 and a directional Survey with C-104 completion packet.	12/31/2024
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	12/31/2024
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	12/31/2024