

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*Bureau of Land Management  
NMNM86024**Carlsbad Field Office**  
**OCD Artesia**

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		6. If Indian, Allottee or Tribe Name
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit or CA/Agreement, Name and/or No.
2. Name of Operator OXY USA INCORPORATED Contact: DAVID STEWART E-Mail: david_stewart@oxy.com		8. Well Name and No. CYPRESS 34 FEDERAL 1
3a. Address 5 GREENWAY PLAZA SUITE 110 HOUSTON, TX 77046-0521	3b. Phone No. (include area code) Ph: 432.685.5717	9. API Well No. 30-015-35053-00-S1
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 34 T23S R29E SESE 460FSL 660FEL		10. Field and Pool or Exploratory Area CEDAR CANYON-BONE SPRING
		11. County or Parish, State EDDY COUNTY, NM

## 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Workover Operations
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

*Accepted for record - NMOC*

1. MIRU pulling unit &amp; reverse unit.

2. POOH w/ pump &amp; rods, ND WH, NU BOP. POOH w/ tbg.

3. PU BHA and clean out to 11705', pump WF PLA fluid loss product to seal existing wells, clean hole clean, POOH.

4. RIH w/ 4" 11# P110 FJ liner, set @ approximately 8050-11700' followed by 4-1/2" 11.6# P110 FJ casing to surface. Cement w/ 96sx SlimTail cement @ 1.64 yield 13.5#, Calc TOC 8050'.

5. ND BOP, RDP, NU frac tree, perf (6 SPF) &amp; frac via 4-1/2" X 4" liner, in 23 stages w/ zone isolation w/ 22 flow through composite plugs from approximately 8194-11700', see attached for

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL****NM OIL CONSERVATION**  
ARTESIA DISTRICT  
AUG 21 2017

14. I hereby certify that the foregoing is true and correct.		<b>RECEIVED</b>	
Electronic Submission #378706 verified by the BLM Well Information System For OXY USA INCORPORATED, sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 06/13/2017 (17DLM2010SE)			
Name (Printed/Typed)	DAVID STEWART	Title	REGULATORY ADVISOR
Signature	(Electronic Submission)	Date	06/12/2017

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>MUSTAFA HAQUE</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>08/16/2017</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office <u>Carlsbad</u>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

**Additional data for EC transaction #378706 that would not fit on the form**

**32. Additional remarks, continued**

detail.

6. After frac, drill out plugs, log well (tracers will be used in later stages w/ coiled tubing and then flow back and test.

7. After flow back, turn well over to operations, Shoot and recover 4-1/2" casing @ approximately 8050' to be able to utilize larger artificial lift for life of well.

**Cypress 34 Fed 1  
30-015-35053  
Oxy USA  
Conditions of Approval**

**Notify BLM at 575-393-2822 (Eddy County) a minimum of 24 hours prior to commencing work.**

**Work to be completed by November 16, 2017.**

1. Must conduct a casing integrity test before perforating and fracturing. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails.
2. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
3. Surface disturbance beyond the originally approved pad must have prior approval.
4. Closed loop system required.
5. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over 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.
6. Operator to have H2S monitoring equipment on location.
7. A minimum of a 2000 (2M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
8. **Subsequent sundry required detailing work done, a C-102 form, and completion report for the new formations. Operator to include well bore schematic of current well condition when work is complete.**
9. **See attached for General Plugback Guidelines**

**MHH 08162017**

**BUREAU OF LAND MANAGEMENT**  
**Carlsbad Field Office**  
**620 East Greene Street**  
**Carlsbad, New Mexico 88220**  
**575-234-5972**

**Permanent Abandonment of Production Zone Conditions of Approval**

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plug back operations shall commence within ninety (90) days from this approval. **If you are unable to plug back the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged back. Failure to do so will result in enforcement action.**
  2. **Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612**
  3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
  4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.
  5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.  
In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement.  
**Before pumping cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**
- Unless otherwise specified in the approved procedure, the cement plug shall consist of either **Neat Class "C"**, for up to 7,500 feet of depth or **Neat Class "H"**, for deeper than 7,500 feet plugs.
6. **Subsequent Plug back Reporting:** Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date work was completed.** If plugging back to a new zone submit a Completion Report, form 3160-4 with the Subsequent Report.
  7. **Trash:** All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

OXY USA Inc. - Current  
Cypress 34 Federal #1  
API No. 30-015-35053

Salt Base: 2936'  
Lamar/Del: 3160'  
Canyon: 5288'  
Bone Spring: 6916'

17-1/2" hole @ 555'  
13-3/8" csg @ 555'  
w/ 475sx-TOC-Surf-Circ

12-1/4" hole @ 3060'  
9-5/8" csg @ 3060'  
w/ 1225sx-TOC-Surf-Circ

8-1/2" hole @ 11759'  
5-1/2" csg @ 11759'  
w/ 2265 sx-TOC-2970'-CBL

KOP @ 7400'

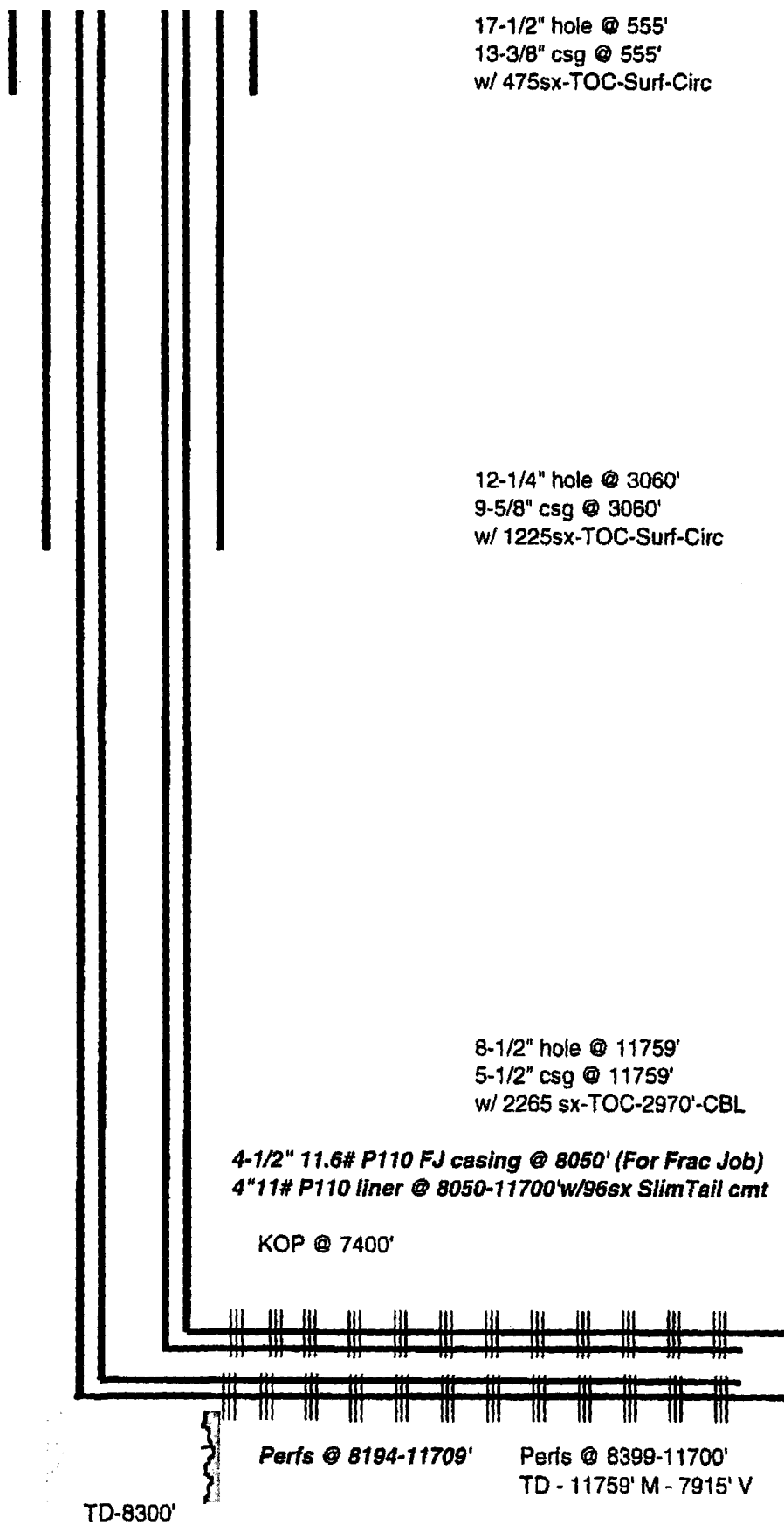
200sx @ 7817-7217'

Perfs @ 8399-11700'

TD - 11759' M - 7915' V

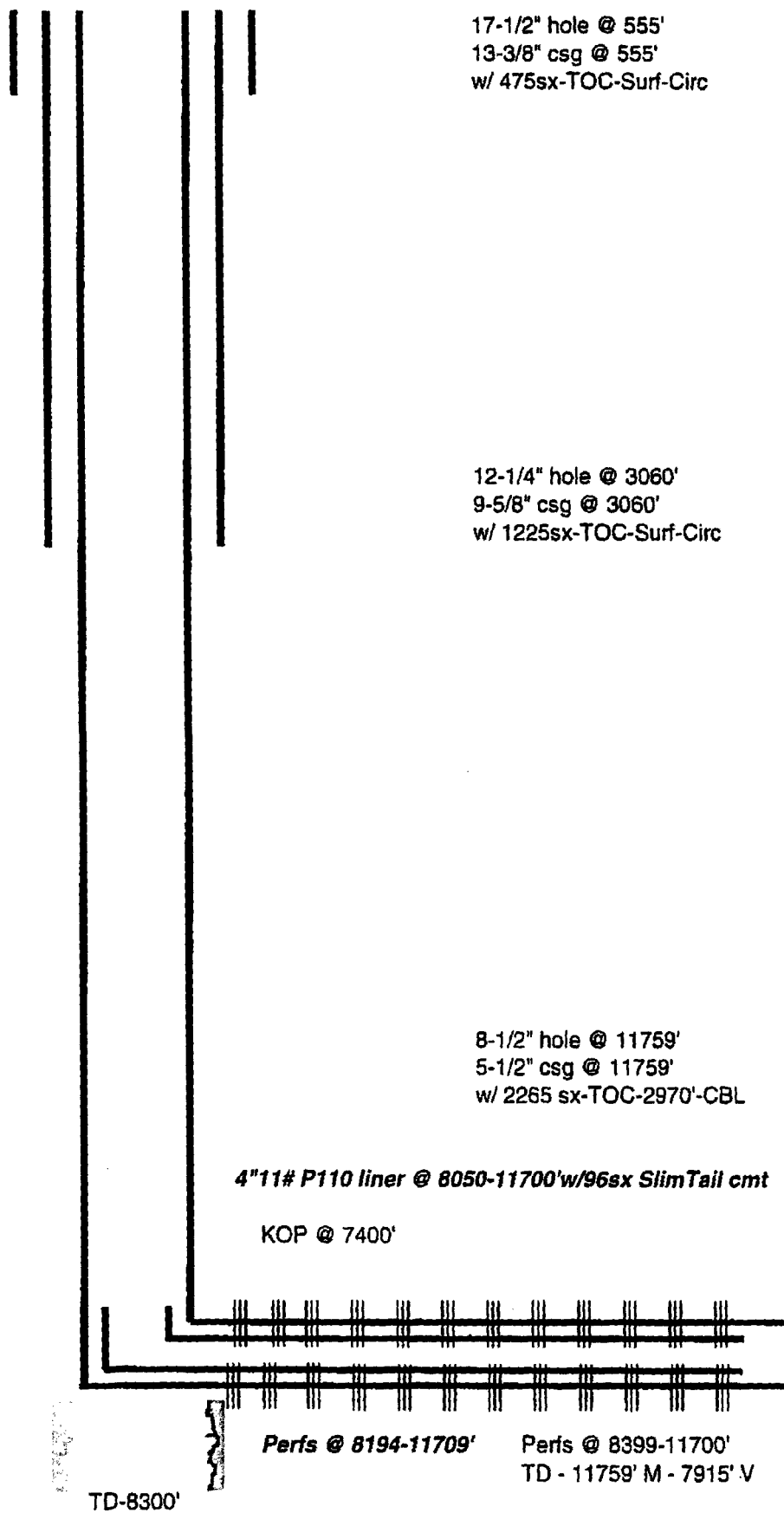
TD-8300'


OXY USA Inc. - Proposed  
Cypress 34 Federal #1  
API No. 30-015-35053



200sx @ 7817-7217'

OXY USA Inc. - Final  
Cypress 34 Federal #1  
API No. 30-015-35053



	<b>OXY USA INC.</b> <b>RECOMPLETE HYDRAULIC FRACTURING PROCEDURE</b> <b>CYPRESS 34 FEDERAL 1H</b>	Revision No: 1
		Revision Date: 06/12/2017
		Rig Type:
		Page No:

## PLUGS AND PERFORATIONS

		Cypress 34-1			
		Interval 1	Interval 2	Interval 3	Plug
		6	6	6	
Stage 1 Perfs, 3 guns loaded @ 60 degree phasing	Top	11604	11655.67	11707.34	11734
	Bottom	11605.67	11657.34	11709.01	11736
Stage 2 Perfs, 3 guns loaded @ 60 degree phasing	Top	11449	11500.67	11552.34	11579
	Bottom	11450.67	11502.34	11554.01	11581
Stage 3 Perfs, 3 guns loaded @ 60 degree phasing	Top	11294	11345.67	11397.34	11424
	Bottom	11295.67	11347.34	11399.01	11426
Stage 4 Perfs, 3 guns loaded @ 60 degree phasing	Top	11139	11190.67	11242.34	11269
	Bottom	11140.67	11192.34	11244.01	11271
Stage 5 Perfs, 3 guns loaded @ 60 degree phasing	Top	10984	11035.67	11087.34	11114
	Bottom	10985.67	11037.34	11089.01	11116
Stage 6 Perfs, 3 guns loaded @ 60 degree phasing	Top	10829	10880.67	10932.34	10959
	Bottom	10830.67	10882.34	10934.01	10961
Stage 7 Perfs, 3 guns loaded @ 60 degree phasing	Top	10674	10725.67	10777.34	10804
	Bottom	10675.67	10727.34	10779.01	10806
Stage 8 Perfs, 3 guns loaded @ 60 degree phasing	Top	10519	10570.67	10622.34	10649
	Bottom	10520.67	10572.34	10624.01	10651
Stage 9 Perfs, 3 guns loaded @ 60 degree phasing	Top	10364	10415.67	10467.34	10494
	Bottom	10365.67	10417.34	10469.01	10496
Stage 10 Perfs, 3 guns loaded @ 60 degree phasing	Top	10209	10260.67	10312.34	10339
	Bottom	10210.67	10262.34	10314.01	10341
Stage 11 Perfs, 3 guns loaded @ 60 degree phasing	Top	10054	10105.67	10157.34	10184
	Bottom	10055.67	10107.34	10159.01	10186
Stage 12 Perfs, 3 guns loaded @ 60 degree phasing	Top	9899	9950.67	10002.34	10029
	Bottom	9900.67	9952.34	10004.01	10031
Stage 13 Perfs, 3 guns loaded @ 60 degree phasing	Top	9744	9795.67	9847.34	9874
	Bottom	9745.67	9797.34	9849.01	9876
Stage 14 Perfs, 3 guns loaded @ 60 degree phasing	Top	9589	9640.67	9692.34	9719
	Bottom	9590.67	9642.34	9694.01	9721
Stage 15 Perfs, 3 guns loaded @ 60 degree phasing	Top	9434	9485.67	9537.34	9564
	Bottom	9435.67	9487.34	9539.01	9566
Stage 16 Perfs, 3 guns loaded @ 60 degree phasing	Top	9279	9330.67	9382.34	9409
	Bottom	9280.67	9332.34	9384.01	9411
Stage 17 Perfs, 3 guns loaded @ 60 degree phasing	Top	9124	9175.67	9227.34	9254
	Bottom	9125.67	9177.34	9229.01	9256
Stage 18 Perfs, 3 guns loaded @ 60 degree phasing	Top	8969	9020.67	9072.34	9099
	Bottom	8970.67	9022.34	9074.01	9101
Stage 19 Perfs, 3 guns loaded @ 60 degree phasing	Top	8814	8865.67	8917.34	8944
	Bottom	8815.67	8867.34	8919.01	8946
Stage 21 Perfs, 3 guns loaded @ 60 degree phasing	Top	8659	8710.67	8762.34	8789
	Bottom	8660.67	8712.34	8764.01	8791
Stage 21 Perfs, 3 guns loaded @ 60 degree phasing	Top	8504	8555.67	8607.34	8634
	Bottom	8505.67	8557.34	8609.01	8636
Stage 22 Perfs, 3 guns loaded @ 60 degree phasing	Top	8349	8400.67	8452.34	8479
	Bottom	8350.67	8402.34	8454.01	8481
Stage 23 Perfs, 3 guns loaded @ 60 degree phasing	Top	8194	8245.67	8297.34	8324
	Bottom	8195.67	8247.34	8299.01	8326





# OXY USA INC.

## RECOMPLETE HYDRAULIC FRACTURING PROCEDURE CYPRESS 34 FEDERAL 1H

Revision No: 1  
Revision Date: 06/12/2017  
Rig Type:  
Page No:

### STAGE 1-22 PUMP SCHEDULE

1420 w/r 50 ft												
			Fluid Information					Proppant Information				
#	Time (min)	Type	Rate (bpm)	Clean (gals)	Dirty (gals)	Cum. Dirty (gals)	Description	Prop. Conc. (PPA)	Description	Stage Sand (lbs)	Cum. Sand (lbs)	
1	2.38	Breakdown	20	2000	2,000	2,000	Slick Water					
2	2.78	Acid	30	500	500	2,500	15% HCl					
3	4.86	Pad	80	7000	7,000	9,500	Slick Water					
4	5.75	Sand-Laden	80	3000	3,034	12,534	Slick Water	0.25	100 Mesh	750	750	
5	6.65	Sand-Laden	80	3000	3,068	15,602	Slick Water	0.50	100 Mesh	1,500	2,250	
6	7.54	Sand-Laden	80	3000	3,102	18,704	Slick Water	0.75	100 Mesh	2,250	4,500	
7	9.33	Sand-Laden	80	6000	6,271	24,975	Slick Water	1.00	100 Mesh	6,000	10,500	
8	11.11	Sweep	80	6000	6,339	31,314	Slick Water	1.25	100 Mesh	7,500	18,000	
9	12.90	Sand-Laden	80	6000	6,407	37,722	Slick Water	1.50	100 Mesh	9,000	27,000	
10	13.49	Sand-Laden	80	2000	2,000	39,722	Slick Water		Sweep		27,000	
11	14.68	Sand-Laden	20	4000	4,181	43,903	15% Un Gel	1.00	40/70 White	4,000	31,000	
12	15.87	Sand-Laden	80	4000	4,271	48,174	15% Un Gel	1.50	40/70 White	6,000	37,000	
13	17.06	Sand-Laden	80	4000	4,317	52,491	15% Un Gel	1.75	40/70 White	7,000	44,000	
14	18.25	Sand-Laden	80	4000	4,362	56,853	15% Un Gel	2.00	40/70 White	8,000	52,000	
15	19.44	Sand-Laden	80	4000	4,407	61,260	15% Un Gel	2.25	40/70 White	9,000	61,000	
16	20.63	Sand-Laden	80	4000	4,452	65,713	15% Un Gel	2.50	40/70 White	10,000	71,000	
17	0.00	Flush	80				Slick Water		(Flush to Top Part)		71,000	