

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.Lease Serial No.
NMNM19848**SUBMIT IN TRIPLICATE - Other instructions on page 2**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM1359458. Well Name and No.
CYPRESS 33 FEDERAL 4H9. API Well No.
30-015-37368-00-S110. Field and Pool or Exploratory Area
CEDAR CANYON11. County or Parish, State
EDDY COUNTY, NM

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
OXY USA INCORPORATEDContact: DAVID STEWART
E-Mail: david_stewart@oxy.com3a. Address
5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 77046-05213b. Phone No. (include area code)
Ph: 432.685.5717

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 33 T23S R29E SENE 1490FNL 250FEL

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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<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 recompleate 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 recompleation 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.

Well Prep Procedure:

1. MIRU PU and rig equipment
2. Ensure well is dead
3. MU tubing equipment and POOH w/2-7/8" tubing and rod pump
4. RIH with cleanout BHA
5. RU power swivel if needed and cleanout to PBTD
6. POOH with cleanout BHA and work string
7. RIH with work string to top of KOP and set RBP. Test casing to 6200# or max treating pressure, whichever is lower.
8. Bleed off pressure and RBIH to latch on RBP, release RBP and begin POOH. LD w/ RBP
9. Perform drift run with Mohawk BHA
10. RIH w/ 4.25" 13.1# P110 R2M expandable liner set @ approximately from

GC 6.28-18
Accepted for record - NMOCNM OIL CONSERVATION
ARTESIA DISTRICT

JUN 27 2018

RECEIVED

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

Electronic Submission #424528 verified by the BLM Well Information System
For OXY USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 06/20/2018 (18PP2026SE)

Name (Printed/Typed) DAVID STEWART

Title REGULATORY ADVISOR

Signature (Electronic Submission)

Date 06/18/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

/s/ Jonathon Shepard

Title

Petroleum Engineer
Carlsbad Field Office

JUN 21 2018

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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 #424528 that would not fit on the form

32. Additional remarks, continued

7936-11200'

11. Expand the liner using Mohawk procedures

Plug & Perf stimulation operation:

1. Conduct pre-job safety meeting, discuss scope of work and hazard
2. Check wellhead pressure and bleed off pressure if any to grounded flowback tank
3. MIRU Cameron WH Company and equipment.
4. Install 10M frac stack on wellhead
5. MIRU frac and WL equipment
6. RIH with WL and plug and perf for stage 1 with 4 clusters (7959-11177') per attached perf design.
7. Spot 7.5% HCl acid and breakdown stage 1
8. Frac stage 1 per the pump schedule below
9. RIH with WL and plug & perf for stage 2 and frac afterwards
10. Repeat process for the remaining stages (estimated 17 total stages)
11. RDMO frac and WL company

Wellbore Clean out and Flowback Procedure:

1. Hold Pre-job safety meeting, discuss scope of work and hazards
2. Check well head pressure, bleed off pressure if any to grounded flowback tank
3. MIRU 2-3/8" CT unit, PU 4.13" JZ bit, (Mohawk liner is 4.158" ID drift) RIH and DO plugs and CO to PBTD
4. Circulate hole clean and pump gel sweeps
5. RDMO CT unit and turn the well over to production
6. Open to Flowback
7. An artificial lift procedure will be provided once flowback operations completed.

Well Prep Procedure:

1. MIRU PU and rig equipment
2. Ensure well is dead
3. MU tubing equipment and POOH w/ 2-7/8" tubing and rod pump with HEEL system. Send to the yard for inspection
4. RIH with cleanout BHA
5. RU power swivel if needed and cleanout to PBTD
6. POOH with cleanout BHA and work string
7. RIH with work string to top of KOP and set RBP. Test casing to 6200 psi or max treating pressure, whichever is lower.
8. Bleed off pressure and RBIH to latch on RBP, release RBP and begin POOH. LD w/ RBP
9. Perform drift run with Mohawk BHA
10. RIH w/ 4.25" 13.1# P110 R2M expandable liner set @ approximately from 7936–11200'.
11. Expand the liner using Mohawk procedures

Plug & Perf stimulation operation

1. Conduct pre-job safety meeting – discuss scope of work and hazard
2. Check wellhead pressure and bleed off pressure if any to grounded flowback tank
3. MIRU Cameron WH Company and equipment.
4. Install 10M frac stack on wellhead
5. MIRU frac and WL equipment
6. RIH with WL and plug and perf for stage 1 with 4 clusters (7959-11177') per attached perf design.
7. Spot 7.5% HCl acid and breakdown stage 1
8. Frac stage 1 per the pump schedule below
9. RIH with WL and plug & perf for stage 2 and frac afterwards
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11. RDMO frac and WL company

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OXY USA Inc. - Cypress 33 Federal 4H – 30-015-37368 – Cedar Canyon Bone Spring

Proposed Perforation & Plug Depth

PLUGS AND PERFORATIONS INTERVALS		Cluster 1	Cluster 2	Cluster 3	Cluster 4	Plug
	Gun Length	2	2	2	2	
	Number of Shots	6	6	6	6	
Stage 1 Perfs: 6 shots loaded @ 60 degree phasing	Top	11031	11079	11127	11175	11200
	Bottom	11033	11081	11129	11177	
Stage 2 Perfs: 6 shots loaded @ 60 degree phasing	Top	10839	10887	10935	10983	11008
	Bottom	10841	10889	10937	10985	
Stage 3 Perfs: 6 shots loaded @ 60 degree phasing	Top	10647	10695	10743	10791	10816
	Bottom	10649	10697	10745	10793	
Stage 4 Perfs: 6 shots loaded @ 60 degree phasing	Top	10455	10503	10551	10599	10624
	Bottom	10457	10505	10553	10601	
Stage 5 Perfs: 6 shots loaded @ 60 degree phasing	Top	10263	10311	10359	10407	10432
	Bottom	10265	10313	10361	10409	
Stage 6 Perfs: 6 shots loaded @ 60 degree phasing	Top	10071	10119	10167	10215	10240
	Bottom	10073	10121	10169	10217	
Stage 7 Perfs: 6 shots loaded @ 60 degree phasing	Top	9879	9927	9975	10023	10048
	Bottom	9881	9929	9977	10025	
Stage 8 Perfs: 6 shots loaded @ 60 degree phasing	Top	9687	9735	9783	9831	9856
	Bottom	9689	9737	9785	9833	
Stage 9 Perfs: 6 shots loaded @ 60 degree phasing	Top	9495	9543	9591	9639	9664
	Bottom	9497	9545	9593	9641	
Stage 10 Perfs: 6 shots loaded @ 60 degree phasing	Top	9303	9351	9399	9447	9472
	Bottom	9305	9353	9401	9449	
Stage 11 Perfs: 6 shots loaded @ 60 degree phasing	Top	9111	9159	9207	9255	9280
	Bottom	9113	9161	9209	9257	
Stage 12 Perfs: 6 shots loaded @ 60 degree phasing	Top	8919	8967	9015	9063	9088
	Bottom	8921	8969	9017	9065	
Stage 13 Perfs: 6 shots loaded @ 60 degree phasing	Top	8727	8775	8823	8871	8896
	Bottom	8729	8777	8825	8873	
Stage 14 Perfs: 6 shots loaded @ 60 degree phasing	Top	8535	8583	8631	8679	8704
	Bottom	8537	8585	8633	8681	
Stage 15 Perfs: 6 shots loaded @ 60 degree phasing	Top	8343	8391	8439	8487	8512
	Bottom	8345	8393	8441	8489	
Stage 16 Perfs: 6 shots loaded @ 60 degree phasing	Top	8151	8199	8247	8295	8320
	Bottom	8153	8201	8249	8297	
Stage 17 Perfs: 6 shots loaded @ 60 degree phasing	Top	7959	8007	8055	8103	8128
	Bottom	7961	8009	8057	8105	

Propose Pump schedule

Slickwater 2 (5,000 ft)		1500 #/ft. 50 ft x 4 Clusters Slickwater Reduced Fluid									
			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	0.79	Acid	30	1000	1,000	1,000	7.5% HCl				
2	6.08	Pad	90	15000	20,000	21,000	Slick Water				
3	9.61	Sand Laden	90	10000	13,635	34,634	Slick Water	0.50	100 Mesh	5,000	5,000
4	13.84	Sand Laden	90	12000	16,543	51,177	Slick Water	0.75	100 Mesh	9,000	14,000
5	19.14	Sand Laden	90	15000	20,904	72,081	Slick Water	1.00	100 Mesh	15,000	29,000
6	26.19	Sand Laden	90	20000	28,174	100,255	Slick Water	1.25	100 Mesh	25,000	54,000
7	36.42	Sand Laden	90	29000	41,290	141,545	Slick Water	1.50	100 Mesh	43,500	97,500
8	47.00	Sand Laden	90	30000	43,166	184,711	Slick Water	1.75	100 Mesh	47,500	150,000
9	52.29	Sweep	90	15000	20,904	205,616	Slick Water	1.00	40/70 White	15,000	165,000
10	57.58	Sand Laden	90	15000	21,131	226,746	Slick Water	1.25	40/70 White	18,750	183,750
11	64.64	Sand Laden	90	20000	28,476	255,222	Slick Water	1.50	40/70 White	30,000	213,750
12	72.75	Sand Laden	90	23000	33,094	288,316	Slick Water	1.75	40/70 White	40,250	254,000
13	80.86	Sand Laden	90	23000	33,441	321,757	Slick Water	2.00	40/70 White	46,000	300,000
14	0.00	Flush	90				Slick Water		(Flush to Top Perf)		300,000

MOHAWK ENERGY EXPANDABLE LINER SPECIFICATIONS

4.25 inch, 0.31 wall x 5.5 inch, 17 lb/ft

FracPatch Specifications

Expandable Pipe Body

Pre-Expansion			Post Expansion		
OD	4.250	inches	OD	4.805	inches
ID	3.630	inches	ID	4.218	inches
Wall Thickness	0.310	inches	Wall Thickness	0.293	inches
Weight	13.100	lb/ft	Drift	4.158	inches
Drift	3.505	inches	Internal Yield	9,895	psi
Seal Joint OD	4.490	inches	Collapse	5,600	psi
Seal Thickness	0.120	inches	Expansion Ratio	16.207	%

Expandable Connection

Pre-Expansion			Post Expansion		
Connection OD	4.310	inches	Connection OD	4.865	inches
Connection ID	3.600	inches	Connection ID	4.218	inches
Drift	3.505	inches	Drift	4.158	inches
Tensile Rating	142,286	lbs	Internal Yield	9,895	psi
Compressive Rating	142,286	lbs	Collapse	5,600	psi
Max DLS	36.01	*/100ft	Tensile Rating	154,125	lbs
Optimum Torque	1,360	ft-lbs	Compressive Rating	138,713	lbs
Max Torque	1,496	ft-lbs	Yield Torque	1,700	ft-lbs

Mohawk Energy Setting Tool:

Appendix A1: Setting Tool

Table 4. 4.25 Setting Tool Specifications

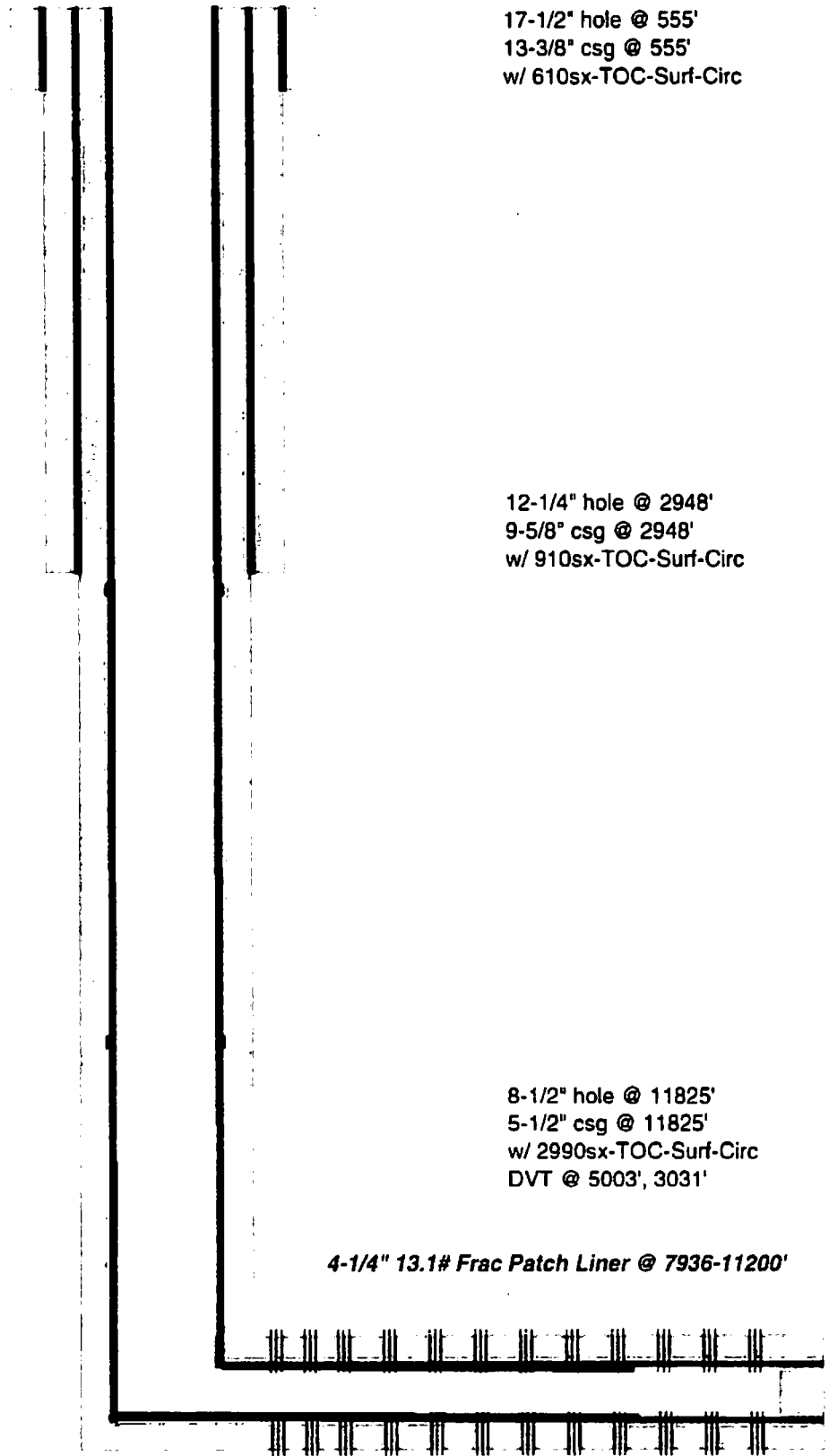
Tool connection up	2-7/8", 7.9# PH-6 Box
Tool weight	900 lbs
Tool length	40.0 ft
Expansion stroke	2.80 ft
Max. dog-leg severity	25 °/100ft
Axial load rating	200,000 lbs
Max. pressure	4,500 psi
Max. temperature	400 °F
Circulation flow rate	30 gpm
Valve shut off flow rate	46 gpm
Pressure/force conversion	44 lbs/psi

Table 5. 3.50 Tool Running Parameters

Event	Pressure or Force
Stabbing sub latching load	500 lbs
Max. slack off during deployment	15,000 lbs
Max. overpull during deployment	25,000 lbs
Drive unit shear disk	1,750 psi
Tool reset	3,000-5,000 lbs
Safety burst disk relief	5,000 psi



OXY USA Inc - Proposed
Cypress 33 Federal #3H
API No. 30-015-36987



17-1/2" hole @ 555'
13-3/8" csg @ 555'
w/ 610sx-TOC-Surf-Circ

12-1/4" hole @ 2948'
9-5/8" csg @ 2948'
w/ 910sx-TOC-Surf-Circ

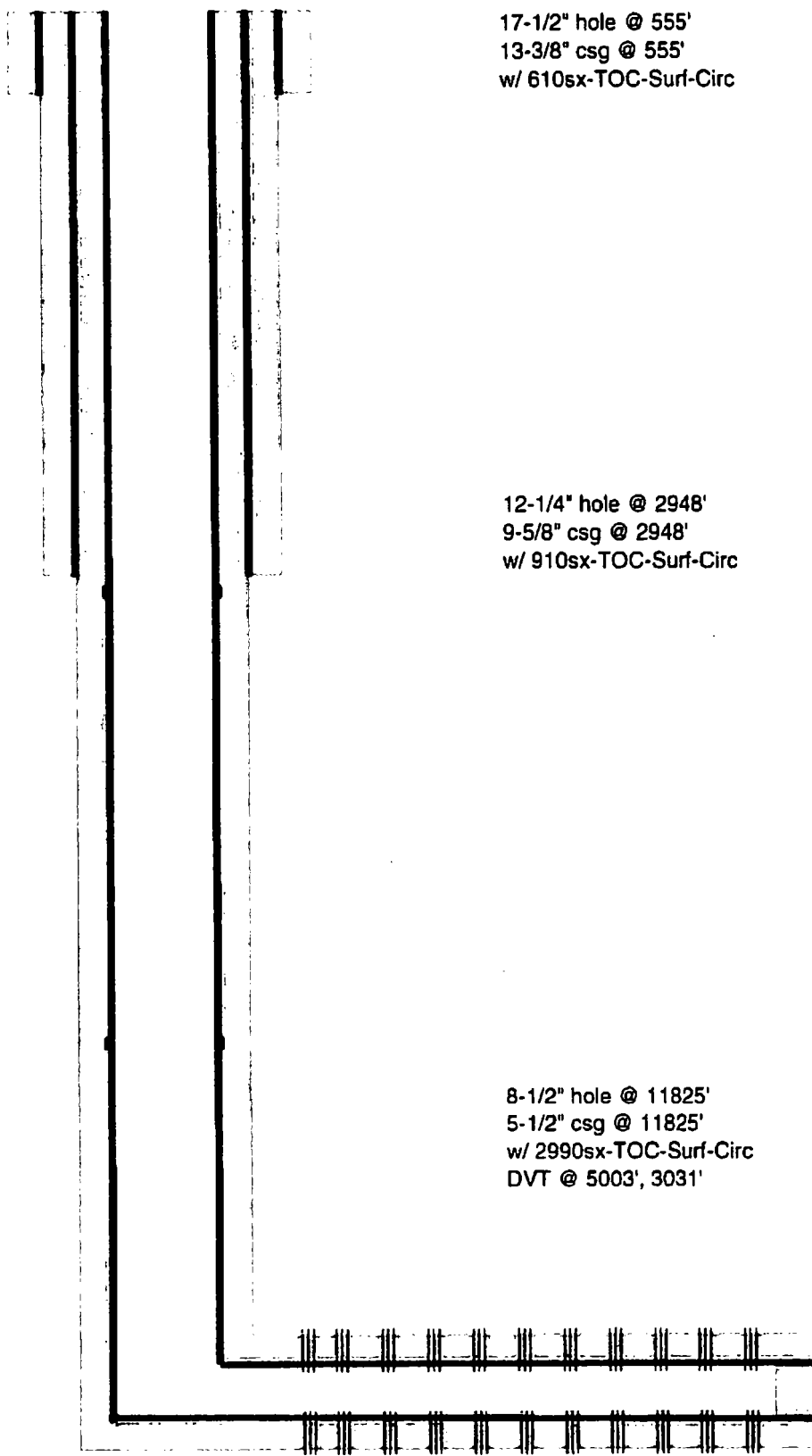
8-1/2" hole @ 11825'
5-1/2" csg @ 11825'
w/ 2990sx-TOC-Surf-Circ
DVT @ 5003', 3031'

4-1/4" 13.1# Frac Patch Liner @ 7936-11200'

Perfs @ 7959-11177'
Original Perfs @ 7950-11700'

TD - 11835'M 7702'V
PB - 11728'M 7702'V

OXY USA Inc - Current
Cypress 33 Federal #4H
API No. 30-015-37368



17-1/2" hole @ 555'
13-3/8" csg @ 555'
w/ 610sx-TOC-Surf-Circ

12-1/4" hole @ 2948'
9-5/8" csg @ 2948'
w/ 910sx-TOC-Surf-Circ

8-1/2" hole @ 11825'
5-1/2" csg @ 11825'
w/ 2990sx-TOC-Surf-Circ
DVT @ 5003', 3031'

Perfs @ 7950-11700'

TD - 11835'M 7702'V
PB - 11728'M 7702'V