

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-34444
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator OXY USA Inc.		6. State Oil & Gas Lease No.
3. Address of Operator P.O. Box 50250 Midland, TX 79710		7. Lease Name or Unit Agreement Name H. Buck State
4. Well Location Unit Letter <u>H</u> : <u>2310</u> feet from the <u>North</u> line and <u>330</u> feet from the <u>east</u> line Section <u>16</u> Township <u>24S</u> Range <u>29E</u> NMPM County <u>Eddy</u>		8. Well Number <u>4</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>2927'</u>		9. OGRID Number 16696
		10. Pool name or Wildcat <u>Pierce Crossing Bone Springs East</u>

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <u>Live, Peat, Frac</u> <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See Attached.

NM OIL CONSERVATION  
 ARTESIA DISTRICT  
 JAN 18 2018  
 RECEIVED

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE David Stewart TITLE Sr. Regulatory Advisor DATE 1/12/18

Type or print name David Stewart E-mail address: david\_stewart@oxy.com PHONE: 432-685-5717

For State Use Only

APPROVED BY: [Signature] TITLE Staff Mgr DATE 1-18-18  
 Conditions of Approval (if any):

**Well Prep Procedure:**

- MIRU PU and rig equipment
- Ensure well is dead
- MU tubing equipment and POOH w/ 2-3/8" tubing send to yard for inspection
- RIH with cleanout BHA

**BHA as following per Mohawk Energy design:**

Table 1. Recommended Clean Out/Drift BHA – (Exact BHA can change depending on connections)

Qty	Description	Mohawk Part Number	Connection Up	Connection Down	Supplier
-226	2-7/8" 10.4# S-135 AOH		2-7/8" AOH Box	2-7/8" AOH Pin	Operator
1	Crossover		2-7/8" AOH Box	2-7/8" 7.9# PH6 Pin	Operator
-110	2-7/8" 7.9# P-110 PH6		2-7/8" 7.9# PH6 Box	2-7/8" 7.9# PH6 Pin	Operator
1	Ball drop drain sub 625 psi/pin	P-02339	2-7/8" 7.9# PH6 Box	2-7/8" 7.9# PH6 Pin	Mohawk
1	Crossover	P-02353	2-7/8" 7.9# PH6 Box	2-7/8" API Reg Pin	Mohawk
1	4.798" String mill	O-00338	2-7/8" API Reg Box	2-7/8" API Reg Pin	Mohawk
1	String Magnet		2-7/8" API Reg Box	2-7/8" API Reg Pin	Mohawk
1	4.798" String mill	O-00338	2-7/8" API Reg Box	2-7/8" API Reg Pin	Mohawk
1	Bit Sub	P-02382	2-7/8" API REG Box	2-7/8" API REG Box	Mohawk
1	Venturi Basket		2-7/8" API Reg Box	N/A	Mohawk

- RU power swivel if needed and cleanout to PBTB (use air foam unit/ nitrogen for circulation if needed)
- POOH with BHA and work string
- RIH with work string to 7000' and test casing to 6200 psi or max treating pressure, whichever is lower.
- Bleed off pressure and RBIH to latch on RBP, release RBP and begin POOH LD w/ RBP, Packer and 2-7/8" tbg
- MIRU Mohawk Energy, prep to RIH w/ 4-1/4" 13.1 Liner @ approximately 7794-10632' per the following Mohawk Procedure:

## **Mohawk Enemy RIH Procedure**

### **Liner Make Up and Deployment:**

1. Conduct a safety meeting. Go over parameters such as number of joints to pick up, safe running speeds, safe running weights, and important depths. Mohawk rep will discuss circulation tool function.
2. Discuss well control options before running the liner.
3. Rig up Mohawk liner lifting subs, T1W valve, and circulating crossover subs.
4. Rig up casing handling equipment including slips and bowls, flush joint elevators, and tongs (if used).
5. Pick up setting tool with elevators using Mohawk's lift nubbin as a shoulder. Run in hole and set in slips (some applications require the slips to be set on the seal joint). Install a safety clamp.
6. Make up liner in final proposed order per *MetalPatch* liner tally sheet.
  - Install lift nubbin on each joint.
  - Mohawk's proprietary r2m thread is made up dopeless. Do not put dope on r2m threads.
  - Make up each r2m connection with Mohawk provided wrenches or to 1,300 ft-lbs with casing crew tongs.
  - Install safety clamp on every joint.
  - Designate one man to watch the lift nubbin while making up joints to ensure it spins freely and does not back off while making a connection.
7. After running all liner joints, pick up the exit joint with the exit joint lift nubbin. Land the exit joint as low as possible in the slips.
8. Rig up the Mohawk false rotary table on top of the exit joint.
9. Swap over to the Mohawk inner string circulating crossover assembly.
10. Rig up the work string slips on top of the Mohawk table. Cover the hole.
11. Swap all handling equipment to run work string inside of the Mohawk liner joints.
12. Pick up the inner string BHA (please see Table in page 13 above). Use minimum dope only on the pins.
13. Check tally and have a meeting to discuss latch-in depth (the inner string BHA will latch into the setting tool and pick up the liner).
14. Begin tripping in hole with work string:
  - Confirm latch-in depth.
  - 10ft above the setting tool, slow the trip in speed to 10 ft/min.
  - Continue to run in hole and latch into the setting tool by slacking off.
  - After latching in, pick up slowly and check to see the tool is latched and the liner lifts out of the slips.
  - Set down and pick up again to check latch-in (resetting the slip and bowl may be required).
  - Use Mohawk supplied jack to confirm tool is latched in for liners less than 100ft (see Appendix 5).
  - Pick up out of the slips.
15. Rig down the work string slips, rig down Mohawk table, and rig down the liner slips.
16. Rig up the work string slips and begin running the liner in the hole.
  - RIH 1 min/stand
  - If anything is tagged while RIH, notify a Mohawk representative.
  - Use caution on and off slips to avoid jarring the liner.
  - Circulate through tool at 0.5 BPM every 50 stands for 3 BBL.
  - If in a horizontal, take pick up and slack off weights before entering the lateral.
  - Monitor pick up and slack off weights.
  - After entering the lateral, pump down tubing 0.5 BPM every 10 stands.



**Liner Expansion Procedure:**

1. Once depth, conduct a safety meeting. Review all tallies and confirm depths.
2. Rig up the pump-in sub, tubing swivel (chicksan), high-pressure hose, and expansion pump on to the tubing.
3. Pressure test surface lines to 6000 psi:
  - Ensure the liner is in exact position prior to starting the test.
  - Ensure pump kick-outs (or pop offs) are working.
  - Ensure there is a way to bleed pressure from tubing.
4. Open tubing and pump through the Mohawk setting tool, break circulation if well allows.
  - Ensure the liner is in exact position prior to circulating.
  - Set kick-outs to 500psi.
  - Do not exceed 0.5 BPM flow rate to circulate.
  - If pressure increases while circulating, do not bleed off.
5. After circulation, set kick-outs to 4000 psi.
6. Increase rate to 1 BPM, pressure will begin to build. Bring pressure to 3,500 psi and hold for 1 minute (hold first stroke only).
7. Bleed tubing down to zero pressure.
8. Mark the work string at the slips for reference.
9. With the rig, pull the tubing to reset the tool with 3,000-5,000 lbs over string weight or 3' (whichever occurs first). Mark the new position and measure.
10. Repeat Steps 6 through 9 until all lower seals are expanded.
11. After lower seals are expanded, begin pulling out with the rig:
  - Mohawk will recommend max hook loads to ensure safe operations.
  - Pull force will be string weight plus expansion force.
  - Expansion force can vary as the expansion tool moves through connections and wellbore restrictions.
  - If max hook load is seen, stop, slack down to neutral hook load, rig up the hose, and repeat Steps 6-9.
  - Pup joints can be on location to help with slacking down.
12. Stop expansion before reaching the upper seals.
  - Check progress using pipe tally.
  - Keep stretch in mind when calculating position.
13. Rig up the high pressure hose on to the tubing.
14. Increase rate to 1 BPM, pressure will begin to build. If liner compression is required, follow Mohawk direction. Otherwise, increase pressure to 3,700 psi.
  - Bring pressure to 1,000 psi and hold.
  - Slack down with pressure on tubing to compress the liner.
  - Increase pressure to 3,700 psi. While holding pressure, pick back up to neutral.
15. Bleed tubing down to zero pressure.
16. Mark the work string at the slips for reference.
17. With the rig, pull the tubing to reset the tool with 3,000-5,000 lbs over string weight. Mark the new position and measure.
18. Repeat steps 14-17 until upper seals are expanded:
  - Use pipe tally and pressure response to gauge when the upper seals have been expanded.
  - Upper seals should be expanded with hydraulic expansion and not mechanical over pull.
19. Clear the rig of all unnecessary personnel.
20. Begin expanding the liner by pulling with the rig.
  - Pull slowly. - Hook load will decrease once the setting tool exits the liner.
  - When exiting the top of the patch insure all pressure has been bled off the tubing.
21. Tag the top of the liner and confirm depth, estimated Top of liner at — 8,400' (Existing Top Perf at 8400')
22. Drop ball to open drain sub.
23. POOH and laydown all Mohawk tools
24. RDMO PU

**Well Prep-Coil tubing TCP and stimulation operation**

- Conduct pre-job safety meeting – discuss scope of work and hazard
- Check wellhead pressure and bleed off pressure if any to grounded flowback tank
- MIRU Cameron WH Company and equipment.
- Install 10M frac stack on wellhead
- MIRU 2"CTU with TCP guns
- RIH with TCP guns and perforate stage 1 with 4 cluster (per attached perf design)
- Spot 7.5% HCl acid and breakdown stage 1
- RDMO 2"CTU.
- MIRU frac and WL company
- Frac stage 1 per the pump schedule below
- RIH with WL and plug & perf for stage 2 and frac afterwards
- Repeat process for the remaining stages (estimated 13 total stages) – Proposed total perms @ 7893-10609' and Frac w/ 321757g Slickwater w/ 300000# sand, see attached for details.
- RDMO frac and WL company
- Open well to flowback

**Well Clean out and Flowback Procedure**

- Hold Pre-job safety meeting, discuss scope of work and hazards
- Check well head pressure- bleed off pressure if any to grounded flowback tank
- MIRU 2" CT unit, PU 3-1/2" JZ bit, (Mohawk liner, 4.25"OD, RIH and DO plugs and CO to PBTD
- Circulate hole clean w/ N2 if needed
- RDMO CT unit
- MIRU PU and casing crew
- RDMO PU
- Turn well to production.
- An artificial lift procedure will be provided once flowback operations completed.

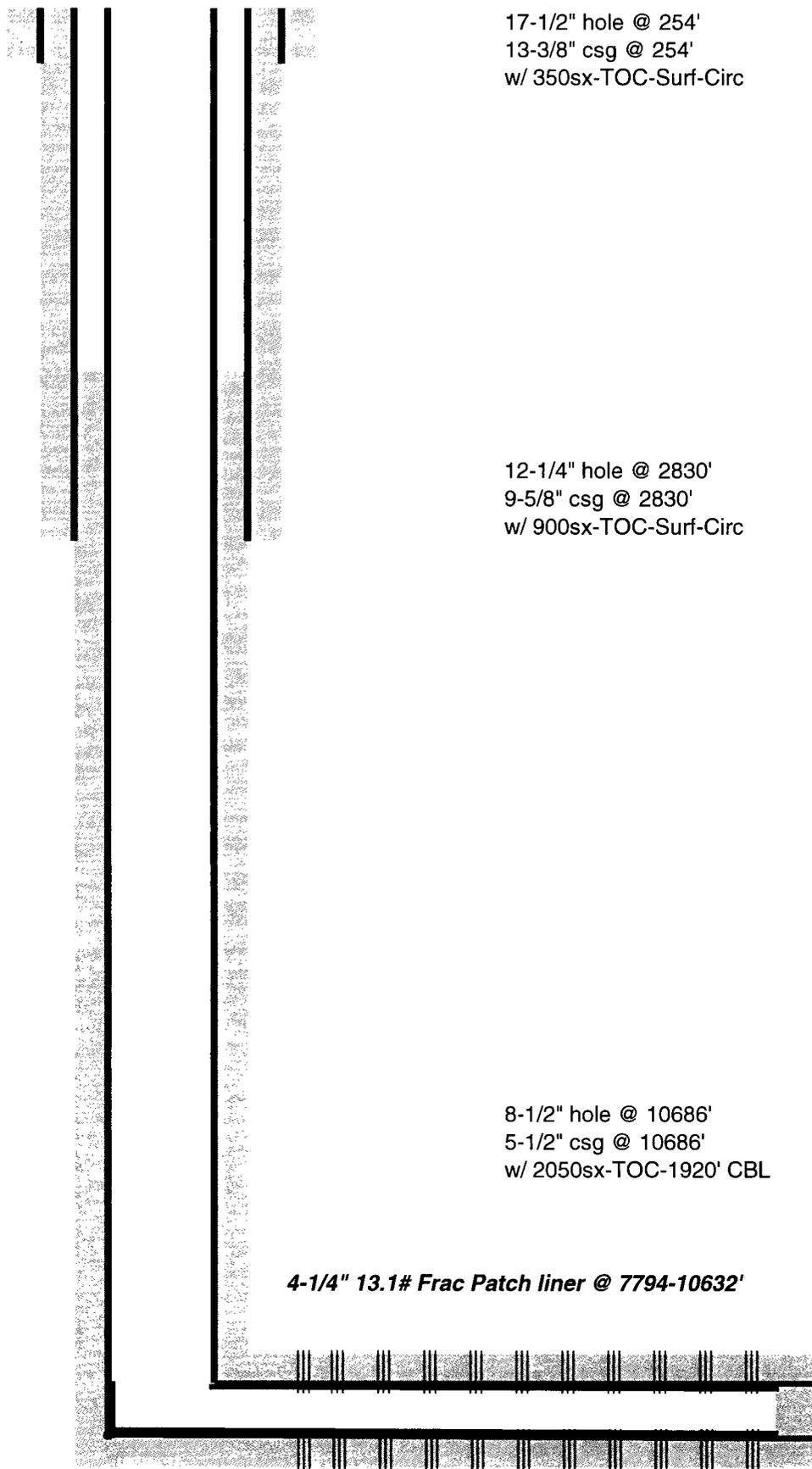
**Propose Perforation & Plug Depth**

Stage	Depth	Perforation Cluster				Plug top
		Cluster 1	Cluster 2	Cluster 3	Cluster 4	
1	Top	10,609	10,564	10,519	10,474	10,434
	Bottom	10,608	10,563	10,518	10,473	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
2	Top	10,394	10,349	10,304	10,259	10,219
	Bottom	10,393	10,348	10,303	10,258	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
3	Top	10,179	10,134	10,089	10,044	10,004
	Bottom	10,178	10,133	10,088	10,043	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
4	Top	9,964	9,919	9,874	9,829	9,789
	Bottom	9,963	9,918	9,873	9,828	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
5	Top	9,749	9,704	9,659	9,614	9,574
	Bottom	9,748	9,703	9,658	9,613	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
6	Top	9,534	9,489	9,444	9,399	9,359
	Bottom	9,533	9,488	9,443	9,398	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
7	Top	9,319	9,274	9,229	9,184	9,144
	Bottom	9,318	9,273	9,228	9,183	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
8	Top	9,104	9,059	9,014	8,969	8,929
	Bottom	9,103	9,058	9,013	8,968	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
9	Top	8,889	8,844	8,799	8,754	8,714
	Bottom	8,888	8,843	8,798	8,753	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
10	Top	8,674	8,629	8,584	8,539	8,499
	Bottom	8,673	8,628	8,583	8,538	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
11	Top	8,459	8,414	8,369	8,324	8,284
	Bottom	8,458	8,413	8,368	8,323	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
12	Top	8,244	8,199	8,154	8,109	8,069
	Bottom	8,243	8,198	8,153	8,108	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	
13	Top	8,029	7,984	7,939	7,894	
	Bottom	8,028	7,983	7,938	7,893	
	Hole	6	6	6	6	
	Phasing	60 Deg	60 Deg	60 Deg	60 Deg	

**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	52,500	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	

OXY USA Inc. - Proposed  
H. Buck State #4  
API No. 30-015-34444



17-1/2" hole @ 254'  
13-3/8" csg @ 254'  
w/ 350sx-TOC-Surf-Circ

12-1/4" hole @ 2830'  
9-5/8" csg @ 2830'  
w/ 900sx-TOC-Surf-Circ

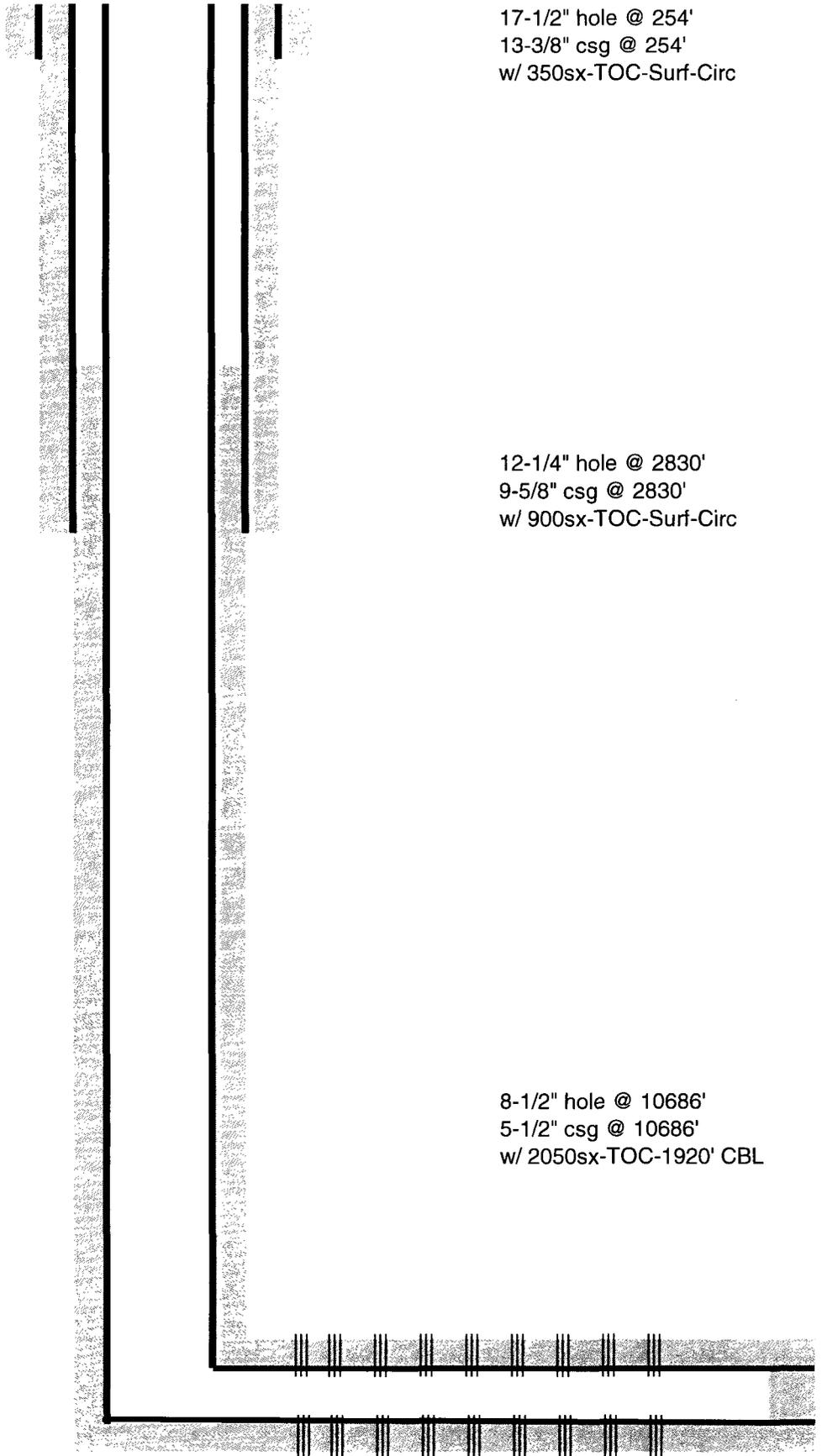
8-1/2" hole @ 10686'  
5-1/2" csg @ 10686'  
w/ 2050sx-TOC-1920' CBL

**4-1/4" 13.1# Frac Patch liner @ 7794-10632'**

**Perfs @ 7893-10609'**  
Original Perfs @ 7879-10326'

TD-10686' M 7689' V

OXY USA Inc. - Current  
H. Buck State #4  
API No. 30-015-34444



17-1/2" hole @ 254'  
13-3/8" csg @ 254'  
w/ 350sx-TOC-Surf-Circ

12-1/4" hole @ 2830'  
9-5/8" csg @ 2830'  
w/ 900sx-TOC-Surf-Circ

8-1/2" hole @ 10686'  
5-1/2" csg @ 10686'  
w/ 2050sx-TOC-1920' CBL

Perfs @ 7879-10326'

TD-10686' M 7689' V  
PBTD-10642' M 7689' V