Submit 1 Copy To Appropriate District	State of New Mexico			Form C-103		103
' Office <u>District I</u> – (575) 393-6161	Energy, Minerals and Natural Resources			Revised July 18, 2013		
1625 N. French Dr., Hobbs, NM 88240				WELL API NO		
<u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISION				0-031-21006	
<u>District III</u> – (505) 334-6178	1220 South St. Francis Dr.			5. Indicate Typ STATE	e of Lease	
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> – (505) 476-3460	Santa Fe, NM 87505			6. State Oil & C		
1220 S. St. Francis Dr., Santa Fe, NM 87505	- · · · · · · · · · · · · · · · · · · ·				VB-1724	
SUNDRY NOTI	CES AND REPORTS ON			7. Lease Name	or Unit Agreement Na	me
(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				on Wash 36 State		
PROPOSALS.)			8. Well Numbe	r		
					1	
2. Name of Operator				9. OGRID Number		
HPOC, LLC  3. Address of Operator			246238 10. Pool name or Wildcat			
322 N. Railroad Ave., PO Box 5046, Buena Vista CO 81211			Arena Blanca Entrada			
4. Well Location						
	From the South Line and 122	23' feet f	rom the Fact I ine			
1	North, Range 5 West of th			nto		
Section 30, Township 20	11. Elevation (Show when					
	GR 6632'; RKB 6644'	iner DR,	IMD, MI, ON, EIC.			
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12. Check A	Appropriate Box to Indi	icate N	ature of Notice	Report or Othe	er Data	
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NOTICE OF IN				SEQUENT R		
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TEMPORARILY ABANDON					P AND A	Ц
PULL OR ALTER CASING DOWNHOLE COMMINGLE	MULTIPLE COMPL		CASING/CEMEN	т ЈОВ 🔲		
CLOSED-LOOP SYSTEM						
OTHER:			OTHER: Detaile	d re-entry & recon	npletion sundry	$\boxtimes$
13. Describe proposed or comp	leted operations (Clearly)	state all r	ertinent details, ar	d give nertinent da	ates including estimate	d date
of starting any proposed wo						u unio
proposed completion or rec			•	•	J	
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HPOC, LLC moved in a workove						
the objective Entrada formation f						
pump testing and fluid level shots				rada formation p	erforations. A detail	bt
daily report accompanies this sun	dry notice, along with a	well-bo	re diagram.			
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					DEC 1 7 2014	
10/1/2014	٦		10/14/0	21.4		
Re-entry Date: 10/1/2014	Rig	g Release	Date: 10/14/2	014		
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Thereby certify that the information	above is true and complete	to the be	est of my knowledge		to Prod	<del>suct</del>
I hereby certify that the information  SIGNATURE:  Buttle	Billion	to the be		ge and belief.	TE: December 10, 20	<u>uct</u>
SIGNATURE: Butch	Butter	TLE: <u>N</u>	<u> Manager</u>	ge and belief. DA	TE: December 10, 20	<u>uct</u>
SIGNATURE: Butch Butler	Butter	TLE: <u>N</u>		ge and belief. DA	0	<u>uct</u>
SIGNATURE:Butch Butler  For State Use Only	Butter	TLE: <u>N</u>	<u> Manager</u>	ge and belief.  DA	TE: <u>December 10, 20</u> NE: <u>719-395-8059</u>	<u>Nuct</u>
SIGNATURE: Butch Butler	Butter	TLE: <u>N</u> address:_	<u> Manager</u>	ge and belief.  DA	TE: December 10, 20	14_

Arena Blanca Field, Torreon Wash 36 State #1 well

API #: 30-031-21006

NM State Lease: VB-1724

Unit I (NE/SE), Section 36-T20N-R5W, McKinley County, New Mexico



## **Operations Report**

Friday, August 29, 2014. Remove dry-hole marker from 7" casing.

Wednesday, September 10, 2014. Dig out around casing for well cellar.

**Friday, September 12, 2014.** Wellhead contractor Fracmaster on location to inspect casing and finalize design for new wellhead. Anticipate wellhead & rig anchor install next week in preparation for rig move Monday, September 22<sup>nd</sup>.

Thursday, September 18, 2014. Install wellhead and cellar.

**Sunday, September 21, 2014.** Aztec Archaeological setting barriers/markings along access route into location.

**Monday, September 22, 2014.** Issue with archaeological site LA29029, Feature 17 located along access road. BLM stops rig move this morning. Initially, BLM gave approval to move rig, then 2 hours later called back and stopped rig move so BLM Cultural Resources group can do onsite inspection of access road, barriers/site markings and Feature 17.

Tuesday, September 23, 2014. Installed Bradenhead valve in 9-5/8" casing.

Wednesday, September 24, 2014 to Friday, September 29, 2014. Work with Walsh Engineering, Aztec Archaeological & BLM archaeologists to access location via BLM ROW in the east half of section 36.

Monday, September 29, 2014. Rain yesterday. Will allow road to dry out and move rig in tomorrow.

**Tuesday, September 30, 2014.** Clear this morning. Moved in Aztec Well Service rig 378 and equipment. Roustabouts filled in well cellar. Rigged up, filled rig pits with water, spotted float with work string. Ready to commence drilling on surface plug tomorrow.

**Wednesday, October 1, 2014.** Began drilling surface plug with blade bit. Encountered junk at 60'. Picked up junk mill, drill from 60' to 68', torque smoothed out. Made 4 magnet runs, TOH with 5" X 5" and 3" X 4" squares of casing plus misc metal. TIH with blade bit, drilled cement from 68' to 261'. Circulate well clean. Shut down for night.

**Thursday, October 2, 2014.** Drilled cement from 261' to 570', drilled out of plug #5. Drilled cement stringers to 610'. Circulate well clean. Pressure test casing to top of plug #4 to 500 psi. Held 5 minutes, good test. TIH and tagged plug #4 at 1179'. Circulate well clean. Shut down for night.

**Friday, October 3, 2014.** Drilled cement from 1179' to 1350', drilled out of plug #4. Drilled cement stringers to 1370'. Circulate well clean. Pressure test casing to top of plug #3 to 560 psi. Held 15 minutes, good test. TIH and tagged plug #3 at 3043'. Drilled cement from 3043' to 3241'. Circulate well clean. Shut down for night.

**Saturday, October 4, 2014.** Drilled cement from 3241' to 3340', drilled out of plug #3. Drilled cement stringers to 3355'. Circulate well clean. Pressure test casing to top of plug #2 to 540 psi. Held 10 minutes,

good test. TIH and tagged plug #2 at 4228'. Drilled cement from 4228' to 4545'. Circulate well clean. Shut down for night.

**Sunday, October 5, 2014.** Drilled plug #2 cement from 4228' to 4825', drilled out of plug #2. Drilled cement stringers to 4835'. Circulate well clean. Pressure test casing to top of plug #1 to 540 psi. Held 10 minutes, good test. TIH and tagged plug #1 at 5277'. Drilled cement from 5277' to 5441', tagged Cast Iron Cement Retainer (CICR) at 5441'. Circulate well clean. Pressure test casing to top of CICR #1 to 545 psi. Held 15 minutes, good test. Shut down for night.

Monday, October 6, 2014. TOOH-with work string and blade bit. PU 6-1/4" Tri-Con bit, drill collars and tbg. MIRU Wilson Services. Conduct MIT witnessed by Monica Kuehling with NMOCD. Pressure test 7" casing from sfc to CICR at 5441' to 560 psi. Test approved. Tag up on CIRC at 5,441'. Drill on CICR for 4 hours. After 1.25 hours, retainer fell from 5441' to 5492'. TD at end of day, 5494'. Circulate well clean. Shut down for night.

Tuesday, October 7, 2014. Continued drilling on CICR from 5494' to 5508', pushing CICR ahead of bit. Drilled up CICR at 5508' and drilled to new TD in Entrada of 5646'. Total fluid loss while drilling open hole section of Entrada is 116 bbls. PU to 5385' in 7" casing, circulate well clean. Shut down for night.

Wednesday, October 8, 2014. Circulate and rotate 8 jts down to get back to bottom. Pump two, 1-gallon Xanvis sweeps. No tight spots or fill running to bottom. TOOH with work string. MIRU Allied Wireline. RIH on wireline with open-hole logging tools. Found loggers TD at 5658′ KB, 12′ deep to steel line measure (SLM) TD. Open-hole logs run from 5656′ KB to bottom of 7″ csg at 5491′. Run GR-NEU up into 7″ csg to 5000′. Round trip 6-1/4″ string mill from sfc to 5500′ in preparation for running 4-1/2″ liner. No tight spots encountered. Shut down for night.

Thursday, October 9, 2014. Prep to run liner. Liner assembly consists of 4-1/2" shoe, 1 jt/4-1/2", 11.6# J-55 csg (shoe jt), 4-1/2" landing collar, 7 jts 4-1/2", 11.6# J-55 csg and 4-1/2" liner hanger assembly. RIH on 162 jts 2-7/8" tubing. RU pumpin manifold to tbg. Set liner at 5644' KB SLM. (Top of liner at 5288' KB SLM. MIRU Baker Hughes cementing services. Mix & pump Premier Light cement to cmt 4-1/2" Liner into 7" Prod Csg & Entrada Open Hole. Pumped 35 bbls fresh water in front. Pump 50 SX, "Premium Light" 12.3#, 2.2 Yield, 110 CU/FT Cmt. Displace W/ 36 BBLS Fresh Water. Plug bumped up @ 160PSI & tested to 1650PSI. (16 BBL CMT SLURRY) (50% excess pumped) (Cmt coverage on backside of Csg +/- 600'). Pulled up out of setting tool & circulated 200 bbls produced water. Monitored returns to pit & did not see any indications of Cmt slurry during circulation. Wash up cementing equipment to rig pit. Pulled up and laid down 4 jts 2-7/8" tubing. Shut down for night.

Friday, October 10, 2014. Shut down. WOC.

Saturday, October 11, 2014. MIRU Blue Jet Wireline Services. RIH with CBL, CCL & GR. Tagged up high at 5528' KB wireline measure. Contact office for orders. Shut down for the day.

Sunday, October 12, 2014. Prep to clean out liner to TD. PU 3-3/4" bit, bit sub, 14 jts 2-3/8" tbg, x-over, 158 jts 2-7/8" tbg. Tagged up at 5523' KB. Found Wiper Plug at 5566'. Drill to float collar @ 5597'. Circulate hole clean. Pressure test csg to 500 psi for 30 min, pressure held, good test. TOOH with work string. MIRU Blue Jet Wireline Services. RIH with GR, CCL & 8-sector CBL. Log from 5652' KB WLM to 5100' KB WLM. Correlate cased hole log with top of liner and GR markers from open-hole logging. No depth correction needed. SLM TD too shallow. CBL showed 90% to 100% bond from 5652' KB to top of liner

cement at 5,299' KB. POOH w/ logging tools. MU perf gun and RIH. Perforate Entrada Pay zone at 5405.5' to 5505.5' KB (1 ft), 6 SPF w/ 60° phasing. POOH w/ wireline and spent perf gun. Shut down for night.

Monday, October 13, 2014. Prep to run pumping equipment. Run one 4-1/2" bull plug, 6 jts 4-1/2" 10.5# J-55 csg for sand trap, x-over, Cavins desander, ESP pump & components, 2 jts 2-7/8" 6.5# N-80 8RD EUE tubing, 2-7/8" X 2.28" ID F Profile Nipple, 82 jts 2-7/8" 6.5# N-80 8RD EUE tubing. Turn on pump, no pump action. POOH with 82 jts tubing and ESP pump. Tested pump, would not turn from top. Could turn from bottom and then top turned. Appears debris was cleared in ESP pump stages by turning. Lowered ESP back into top of well. Shut down for night.

**Tuesday, October 14, 2014.** RIH with ESP and tubing. Function test ESP for 20 minutes, pump working properly. Drop Standing Valve, pressure test tubing to 1000 psi for 15 minutes, good test, witnessed by Josh Jacobs. Bottom of production equipment (sand trap) set at 3030.51' KB. F-nipple at 2762.90' KB. Install 7" wellhead. RD Aztec Well Service #378 and all equipment. Turn well over to production.

One, 400 bbls steel tank delivered to location and set.

Wednesday, October 15 to Monday, October 20, 2014. Waiting on facility installation.

**Wednesday, October 29, 2014.** Move in generator, tie-in Variable Frequency Drive (VFD) to Electric Submersible Pump (ESP) motor cable. Turn on ESP for production test. Well pumped off. Shut-in for fluid/pressure build-up and fluid level shot.

**Thursday, October 30, 2014.** Well shut-in for fluid/pressure build-up and fluid level shot.

**Friday, October 31, 2014.** Shoot fluid level, 66 jts down, approximately 2097' depth. Appears we have little to no fluid entry from reservoir. Investigate.

**Friday, November 7, 2014.** Turn on Electric Submersible Pump, no fluid to surface. Pumping at rate of approximately 320 bbls of fluid per day. Electric Submersible Pump shuts down on underload fault. Reshoot fluid level, 65.5 jts down, approximately 2,067' depth. Appears existing perforations from 5,504.5' to 5,505' are not communicating with reservoir and we are getting no fluid entry. We will explore option to acidize through the tubing/pump to remove cement damage around perforations.

**Wednesday, November 26, 2014.** Restart Electric Submersible Pump to determine if any change in fluid entry. Same behavior as on 11/7, i.e. no fluid entry. Shoot fluid level, still 65.5 jts down. Install NuFlow flowmeter in flowline at wellhead.

**Sunday, November 30, 2014.** After discussions with vendors, we cannot effectively acidize the current perforated zone (5,504.5' to 5,505') through the tubing and Electric Submersible Pump. We are lining up rig and equipment to pull Electric Submersible Pump and tubing. Plan to move in rig as soon as possible and re-perf Entrada with larger interval from 5,493' to 5,503' and swab. Once fluid entry rate established, will re-run Electric Submersible Pump for production testing.

Wellhead: Independent Rector

Ground Level: 6,632'

KB Elevation: 6,644'
Anchors Tested: Sept. 18, 2014

Csg tested: October 6, 2014

Torreon Wash 36 State #1
HPOC, LLC

KB: 12'

FIELD: Arena Blanca Entrada

County: McKinley
API#: 30-031-21006

Loc: NE/SE Sec. 36-T20N-R5W 2,143' FSL & 1,223' FEL

**ELEVATIONS: 6632' GL, 6644' RKB** 

9-5/8" Surface Casing, 36#, J-55 LT&C @ 353' KB. Cemented to surface W/ 248 Sx.

7", 23#, J-55, LT&C, Production Casing Fr: Surface > 5,491' KB.

2-7/8", 6.5#, N-80, 8RD EUE Production Tbg Detail

(82)- Jts 2-7/8" Tbg.

2-7/8" X 2.280" ID "F" Profile Nipple.

(2)- Jts 2-7/8" Tbg

2-7/8" ESP Pump.

2-7/8" Seal Assembly.

2-7/8" BOI (Bolt on intake)

2-7/8" 20HP E-Motor.

2-7/8" EUE x 4-1/2" LT&C Cross Over Sub.

(1) Cavins Desander Model # D2707F.

Top of liner @ 5,286.5' KB. (6)- Jts 4-1/2", 11.6#, LT&C Csg & bull plug (sand trap ).

TOC behind 4-1/2"

EOT @ 3,030.51' KB.

Csg @ 5,300' BLUE JET

<u>CBL</u>

TVD- 5,660' KB PBTD- 5.658' KB

BHT- N/A

4-1/2", 11.6#, J-55, LT&C, Fr: 5,298.5'KB to 5,653'KB.

Drift: 6.059" / BPF: 0.03714 / Burst-11,220 psi @ 100%

4-1/2", 10.5#, K-55, 8RFS x 7", 20-26# Liner Assembly as follow's:

4-1/2" x 7" Liner Hanger W/ THL 4-Cluth Packer (12K Shear) (11.95)

(7)- Jts of 4-1/2" x 4.00"ID, 11.6#, J-55, LT&C Casing. (309.05)

4-1/2"x 4.00"ID, K-55, 8RFL BOX LTC x STC PIN, "L" Landing Collar.

(1)- 4-1/2" x 4.00"ID, 11.6#, J-55, LT&C Shoe Jt. (44.15)

4-1/2", N-80, 8RFL, LT&C Box. "LA" Set Shoe W/ alum nose piece.

Entrada Perfs @ 5,504.5' KB > 5,505.5' KB: 6 SPF W/ 60° Phasing.

Revised by Josh Jacobs Revised 10/13/2014

Revised by Butch Butler Revised 12/9/2014