

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

<b>Well Name:</b> HARRINGTON	<b>Well Location:</b> T24N / R1W / SEC 32 / NESE / 36.264688 / -106.959979	<b>County or Parish/State:</b> RIO ARRIBA / NM
<b>Well Number:</b> 7	<b>Type of Well:</b> CONVENTIONAL GAS WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMSF079352A	<b>Unit or CA Name:</b> HARRINGTON	<b>Unit or CA Number:</b> NMNM073787
<b>US Well Number:</b> 300390522500S1	<b>Well Status:</b> Gas Well Shut In	<b>Operator:</b> M & M PRODUCTION & OPERATION

**Subsequent Report**

**Sundry ID:** 2757915

**Type of Submission:** Subsequent Report

**Type of Action:** Plug and Abandonment

**Date Sundry Submitted:** 10/24/2023

**Time Sundry Submitted:** 02:53

**Date Operation Actually Began:** 10/11/2023

**Actual Procedure:** As Record Title Owner of Lease No. NMSF079352A, MorningStar Operating LLC has completed the P&A of the Harrington #7, API 30-039-05225, as of 10/18/2023. Attached are the Final WBD and the Daily Cement Reports.

**SR Attachments**

**Actual Procedure**

Harrington\_7\_Final\_P\_A\_Cementing\_Reports\_20231024145200.pdf

Harrington\_\_7\_P\_A\_WBD\_Final\_10\_23\_2023\_20231024145200.pdf

MorningStar\_Harrington\_7\_Email\_10242023\_20231024145200.pdf

**BLM Point of Contact**

**BLM POC Name:** KENNETH G RENNICK

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5055647742

**BLM POC Email Address:** krennick@blm.gov

**Disposition:** Accepted

**Disposition Date:** 10/24/2023

**Signature:** Kenneth Rennick

# [EXTERNAL] Harrington 7\_P&A Subsequent Sundry

Connie Blaylock <cblaylock@txopartners.com>

Tue 10/24/2023 2:05 PM

To:Rennick, Kenneth G <krennick@blm.gov>;Fachan, Shannon L <sfachan@blm.gov>  
Cc:Dave Pearson <dpearson@txopartners.com>;Dave Harford <dharford@txopartners.com>;Brodie Savage <bsavage@txopartners.com>;Jason Peace <JPeace@ctfieldsvcs.com>;Robert W. Berry <RBerry@txopartners.com>

📎 2 attachments (595 KB)

Harrington #7\_P&A WBD Final\_10-23-2023.pdf; Harrington 7\_Final P&A Cementing Reports.pdf;

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hi Kenny and Shannon,  
As Record Title Owner of Lease No. NMSF079352A, MorningStar Operating LLC has completed the P&A of the Harrington #7, API 30-039-05225, as of 10/18/2023.  
Attached are the Final WBD and the Daily Cement Reports.

*Thank you,  
Connie Blaylock*



400 W. 7th Street  
Fort Worth, TX 76102  
*(deliveries: 400 W. 6th Street)*

Connie Blaylock  
Senior Regulatory Analyst  
TXO Partners, L.P. / MorningStar Operating LLC / Cross Timbers Energy, LLC  
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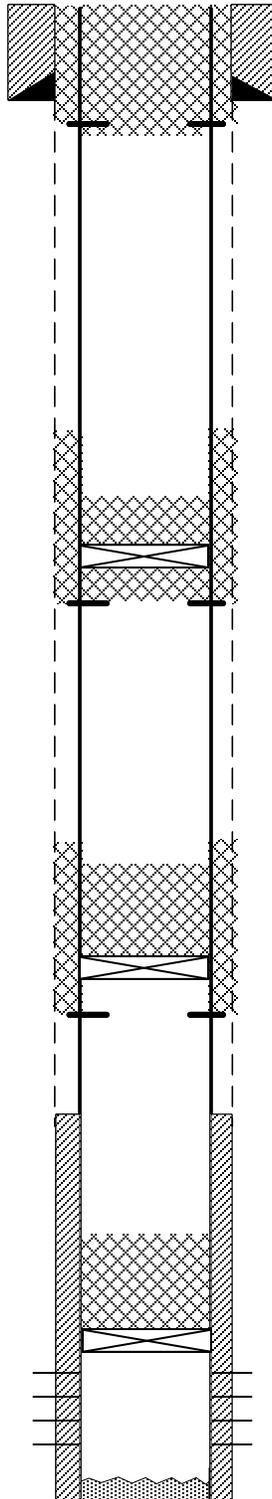
**Assigned Operator:**  
**M&M Production & Operation Inc.**  
**(MorningStar Operating, LLC created)**

Prepared by: B.Savage  
 Date: 05/23/2023  
 Final Bberry 10/23/2023  
 KB = 8?  
 GL = 7,409'  
 API# 30-039-05225  
 Spud Date: 07/21/1962  
 Date Completed: 08/20/1962

**Harrington #7**  
**Rio Arriba County, NM**  
 SE/4 Section 32 of 24N-1W

**Final P&A**

TD – 3,194'; PBTD – 3,182'  
 Surface Csg: 8-5/8" 24# CFI  
 Setting Depth: 98'  
 Cement  
 60sx Cement  
 Production Csg: 70 jts 4-1/2" 9.5# CFI  
 Setting Depth: 3,182'  
 Cement:  
 100 sx cement  
 TOC unknown  
 Perforations:  
 3,117' – 3,139' w/ 2spf  
 8/15/1962 Frac:  
 30,000lbs and 36,788gal water  
 Avg Inj Rate = 40.4 gpm  
 Treating pressure = 1500-2050 psi



**Plug 4 (surface shoe plug)**  
 Perfs @ 148' – establish circulation through BH - pump 90 sx cmt and circulate good cement to surface – cut off WH – cmt to surface both casings – install DHM – top off with 15 sx cmt

**PLUG 3 (~ approx. Nacimiento ~)**  
 Perfs @ 1,530' - set CICR @ 1,490' – establish injection rate 1.5 bpm @ 950 psi pump 55 sx cmt – 43 sx cmt behind pipe, 3.5sx cmt below CICR, 8.5sx cmt on top (WOC - tag cmt top 1401' – tag witnessed by BLM rep) – Note: prior to completing this plug a retainer was prematurely set ~30' from surface – the retainer was drilled up, and the remaining bottom section of the retainer was effectively chased downhole and out of the way to ~1605'

**PLUG 2 (Ojo)**  
 Perfs @ 2,825' - set CICR @ 2,787' – attempt to establish injection below retainer – pressure out at 1100 psi – no break, no injection rate – spot 12sx cmt on top of retainer (WOC – tag 2610' – tag witnessed by BLM rep)

**Plug 1 (PC/FC/Kirtland) CICR Set @ 3,082' – attempt to establish inj below retainer, pressure out at 1000 psi – no inj rate established below retainer - spot 18sx cmt on top of retainer (WOC - tag TOC 2830' – Tag witnessed by BLM rep)**

**NMOCD Record or MSOgeology**

Nacimiento –	x,xxx' or 1,500'
Ojo Alamo –	2,772' or 2,799'
Kirtland –	3,012' or x,xxx'
Fruitland –	3,078' or 3,012'
Picture Cliffs –	3,113' or 3,112'

**Picture Cliffs Perfs (1962):**  
 Perfs 3,117' – 3139' (2spf)

PBTD: 3,182'







AZTEC WELL SERVICING CO.

CEMENT JOB DETAIL SHEET

CUSTOMER:	MORNINGSTAR OPERATING, LLC.	DATE:	October 13, 2023	API Number:	30-039-05225	TYPE OF JOB:	P & A
LEASE & WELL NAME:	HARRINGTON COM #7	LOCATION:	Sec.32,T324N,R01W	SERVICE SUP:	DEAN MESTAS		
SERVICE CONTRACTOR:	RIG 450	OPERATOR:	AZTEC WELL SERVICE	COUNTY:	RIO ARRIBA	STATE:	NEW MEXICO

MATERIALS FURNISHED:	TYPE OF PLUGS:		LIST CSG. HARDWARE:	SQUEEZE MANIFOLD:	TOP OF EACH FLUID:	PHYSICAL SLURRY PROPERTIES:					
	TOP					SLURRY WEIGHT: Lb/gal	SLURRY YIELD: Cuft/sk	WATER REQ.: Gals/sk	PUMP TIME: hr:mm	SLURRY: bbls	MIX WATER: bbls
	BOTTOM										

PRE-FLUSH - FRESH WATER										
Plug 1: Pumped 3.7bbls cement slurry ((18sx; 15.8ppg, 1.15cuf/ft, 5.0gals/sk))					2855'	15.80	1.15	5.00	3.7	2.1

AVAILABLE MIX WATER: 210.0 BBLs				AVAILABLE DISPLACEMENT WATER: 200.0 BBLs				TOTAL MIX WATER: 2.1					
HOLE			TBG.-CSG.-D.P.				TBG.-CSG.-D.P.				COLLAR DEPTHS		
SIZE	% EXCESS	DEPTH	SIZE	WEIGHT	TYPE	DEPTH	SIZE	WEIGHT	TYPE	DEPTH	SHOE	FLOAT	STAGE
12 1/4	100%	98'	8 5/8	24.00	J-55	98'	2-3/8"	4.70	J-55	3082'			0
LAST CASING			PKR-CMT RET-BR PL-LINER			PERF DEPTHS		TOP CONNECTION		WELLBORE FLUID			
SIZE	WEIGHT	TYPE	DEPTH	BRAND & TYPE	DEPTH	TOP	BOTTOM	SIZE	THREAD	TYPE	WEIGHT		
4 1/2	9.50	J-55	3182'			3117'	3139'	2 3/8	8 ROUND	PRODUCED WATER	8.40		
CALCULATED DISPLACEMENT VOLUME; BBL				CAL. PSI	CAL. MAX PSI	OP. MAX	MAX TBG. PSI	MAX CASING PSI		DISPLACEMENT FLUID		WATER	
TUBING	CASING	CASING	TOTAL	BUMP PLUG	TO REVERSE	SQ. PSI	RATED	OPER	RATED	OPER	TYPE	WEIGHT	SOURCE
						650		1,100		650	FRESH WATER	8.33	CITY WATER

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CASING, ETC., PRIOR TO CEMENTING:

PUMP DETAILS: DAILY SUMMARY:

TIME	PRESSURE - PSI		RATE	BBL FLUID	FLUID	SAFETY MEETING:	CREW	CO. REP.
HR: MIN:	PIPE	ANNULUS	BPM:	PUMPED:	TYPE:			
5:00	-	-	-	-	-			
7:00	-	-	-	-	-			
7:15	0	0/0	-	-	-			
7:30	-	-	-	-	-			
8:10	-	-	-	-	-			
9:30	0	0	3.00	58.00	H2O			
9:45	-	-	-	-	-			
10:15	-	-	-	-	-			
-	-	-	-	-	-			
11:45	-	-	-	-	-			
12:50	1,000	0	2.00	2.50	H2O			
13:02	250	0	2.00	2.00	H2O			
13:15	250	0	2.00	3.70	CEMENT			
13:25	200	0	2.50	11.20	H2O			
13:30	-	-	-	-	-			
-	-	-	-	-	-			
13:45	0	250	3.00	65.00	H2O			
-	-	-	-	-	-			
14:00	-	-	-	-	-			
14:45	-	-	-	-	-			
15:00	-	-	-	-	-			

BUMPED PLUG:	PSI TO BUMP PLUG:	TEST FLOAT EQUIPMENT:	TOTAL BBL PUMPED:	BBL CMT. RETURNS/ REVERSED:	PSI LEFT ON CSG.:	SPOT TOP CEMENT:	AZTEC WELL SERVICING CO REP.:	DEAN MESTAS
			142.4	0.5	0	2855'	CUSTOMER REP.:	JASON PEACE
							CUSTOMER REP. SIGNATURE:	
								CUSTOMER AUTHORIZING AGENT







AZTEC WELL SERVICING CO.

CEMENT JOB DETAIL SHEET

CUSTOMER: <b>MORNINGSTAR OPERATING, LLC.</b>	DATE: <b>October 18, 2023</b>	API Number: <b>30-039-05225</b>	TYPE OF JOB: <b>P &amp; A</b>
LEASE & WELL NAME: <b>HARRINGTON COM #7</b>	LOCATION: <b>Sec.32,T324N,R01W</b>	SERVICE SUP: <b>DEAN MESTAS</b>	
SERVICE CONTRACTOR: <b>RIG 450</b>	OPERATOR: <b>AZTEC WELL SERVICE</b>	COUNTY: <b>RIO ARRIBA</b>	STATE: <b>NEW MEXICO</b>

MATERIALS FURNISHED:	TYPE OF PLUGS:		LIST CSG. HARDWARE:	SQUEEZE MANIFOLD:	TOP OF EACH FLUID:	PHYSICAL SLURRY PROPERTIES:					
	TOP	BOTTOM				SLURRY WEIGHT: Lb/gal	SLURRY YIELD: Cuft/sk	WATER REQ.: Gals/sk	PUMP TIME: hr:mm	SLURRY: bbls	MIX WATER: bbls

<b>PRE-FLUSH - FRESH WATER</b>										
<b>Plug 4: Pumped 18.5bbls cement slurry ((90sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk))</b>	Surface	15.80	1.15	5.00				18.5	10.7	
<b>Top off: Pumped 3.1bbls cement slurry ((15sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk)) to top off casing &amp; fill cellar</b>	Surface	15.80	1.15	5.00				3.1	1.8	

AVAILABLE MIX WATER: <b>210.0</b> BBLs	AVAILABLE DISPLACEMENT WATER: <b>200.0</b> BBLs	TOTAL MIX WATER: <b>12.5</b>															
HOLE				TBG.-CSG.-D.P.				TBG.-CSG.-D.P.				COLLAR DEPTHS					
SIZE	% EXCESS	DEPTH	SIZE	WEIGHT	TYPE	DEPTH	SIZE	WEIGHT	TYPE	DEPTH	SHOE	FLOAT	STAGE				
12 1/4	100%	98'	8 5/8	24.00	J-55	98'	2 3/8	4.70	J-55	169'			0				
LAST CASING				PKR-CMT RET-BR PL-LINER				PERF DEPTHS				TOP CONNECTION			WELLBORE FLUID		
SIZE	WEIGHT	TYPE	DEPTH	BRAND & TYPE		DEPTH	TOP	BOTTOM	SIZE	THREAD	TYPE		WEIGHT				
4 1/2	9.50	J-55	3182'				3117'	3139'	2 3/8	8 ROUND			8.40				
CALCULATED DISPLACEMENT VOLUME; BBL				CAL. PSI		CAL. MAX PSI		OP. MAX		MAX TBG. PSI		MAX CASING PSI		DISPLACEMENT FLUID		WATER	
TUBING	CASING	CASING	TOTAL	BUMP PLUG	TO REVERSE	SQ. PSI	RATED	OPER	RATED	OPER	RATED	OPER	TYPE	WEIGHT	SOURCE		
						650	650		1,100		650		FRESH WATER	8.33	CITY WATER		

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CASING, ETC., PRIOR TO CEMENTING:

PUMP DETAILS:							DAILY SUMMARY:						
TIME	PRESSURE - PSI		RATE	BBL FLUID	FLUID	SAFETY MEETING: CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>	TEST LINES: _____ PSI						
HR: MIN:	PIPE	ANNULUS	BPM:	PUMPED:	TYPE:								
5:30	-	-	-	-	-		CIRCULATED THE WELL: RIG PUMP <input type="checkbox"/> CMT PUMP <input checked="" type="checkbox"/>						
6:45	-	-	-	-	-		Travel to location						
7:00	0	0/0	-	-	-		Pre-Start Inspection, Service & Start equipment						
7:30	-	-	-	-	-		Check PSI on Well: Tbg = 0psi; Csg = 0psi; BH = 0psi.						
7:54	-	-	-	-	-		TIH w/ tubing to tag top of cement...Tagged TOC at 1401',,,witnessed by BLM						
8:20	-	-	-	-	-		TOOH & LD tubing						
-	-	-	-	-	-		RU wireline service to perforate casing						
-	-	-	-	-	-		RIH w/ perf gun and wireline to perf depth of 148',,,perforated casing successfully						
8:42	-	-	-	-	-		ROOH w/ wireline & LD perf gun...verified all shots fired...shut in and prepare to establish injection rate from surface						
8:54	0	150	2.00	16.00	H2O		TIH w/ tubing to 169'						
9:10	0	100	2.00	2.00	H2O		Pumped 8.5bbls to load & circulate thru BH successfully						
9:30	0	100	2.00	23.60	CEMENT		Pumped 2.0bbls fresh water ahead						
9:45	-	-	-	-	-		Pumped 18.5bbls cement slurry ((90sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk))...circulated 2.0bbls good cement to surface						
-	-	-	-	-	-		SD						
-	-	-	-	-	-		MIRU welder...cut wellhead off...had cement to surface on both casings						
-	-	-	-	-	-		Install dryhole marker						
-	25	0	1.00	3.10	CEMENT		Pumped 3.1bbls cement slurry ((15sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk)) to top off & fill cellar						
-	-	-	-	-	-		SD...end of well						
13:30	-	-	-	-	-		Travel to the yard						

BUMPED PLUG:	PSI TO BUMP PLUG:	TEST FLOAT EQUIPMENT:	TOTAL BBL PUMPED:	BBL CMT. RETURNS/ REVERSED:	PSI LEFT ON CSG.:	SPOT TOP CEMENT:	AZTEC WELL SERVICING CO REP.: <b>DEAN MESTAS</b>	CUSTOMER REP.: <b>JASON PEACE</b>
			44.7	2.0	0	Surface	CUSTOMER REP. SIGNATURE: _____	CUSTOMER AUTHORIZING AGENT

**Assigned Operator:**  
**M&M Production & Operation Inc.**  
**(MorningStar Operating, LLC created)**

Prepared by: B.Savage  
 Date: 05/23/2023  
 Final Bberry 10/23/2023  
 KB = 8?  
 GL = 7,409'  
 API# 30-039-05225  
 Spud Date: 07/21/1962  
 Date Completed: 08/20/1962

**Harrington #7**  
**Rio Arriba County, NM**  
 SE/4 Section 32 of 24N-1W

**Final P&A**

TD – 3,194'; PBTD – 3,182'

Surface Csg: 8-5/8" 24# CFI  
 Setting Depth: 98'

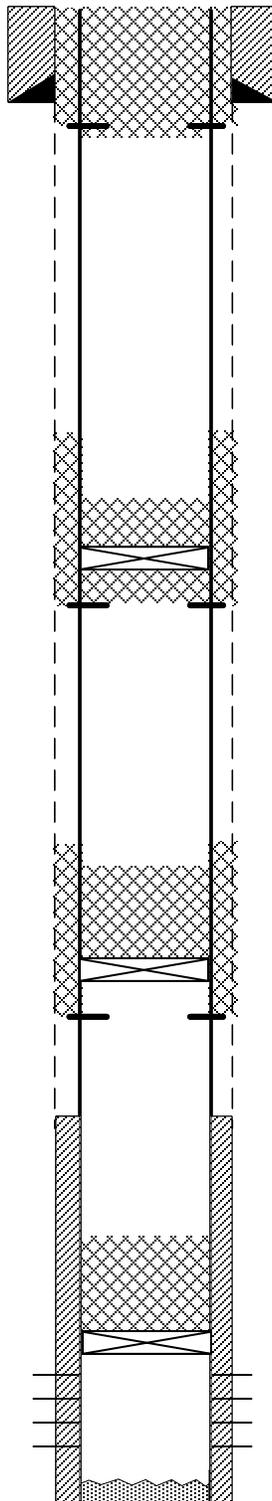
Cement  
 60sx Cement

Production Csg: 70 jts 4-1/2" 9.5# CFI  
 Setting Depth: 3,182'

Cement:  
 100 sx cement  
 TOC unknown

Perforations:  
 3,117' – 3,139' w/ 2spf

8/15/1962 Frac:  
 30,000lbs and 36,788gal water  
 Avg Inj Rate = 40.4 gpm  
 Treating pressure = 1500-2050 psi



**Plug 4 (surface shoe plug)**  
 Perfs @ 148' – establish circulation through BH - pump 90 sx cmt and circulate good cement to surface – cut off WH – cmt to surface both casings – install DHM – top off with 15 sx cmt

**PLUG 3 (~ approx. Nacimiento ~)**  
 Perfs @ 1,530' - set CICR @ 1,490' – establish injection rate 1.5 bpm @ 950 psi pump 55 sx cmt – 43 sx cmt behind pipe, 3.5sx cmt below CICR, 8.5sx cmt on top (WOC - tag cmt top 1401' – tag witnessed by BLM rep) – Note: prior to completing this plug a retainer was prematurely set ~30' from surface – the retainer was drilled up, and the remaining bottom section of the retainer was effectively chased downhole and out of the way to ~1605'

**PLUG 2 (Ojo)**  
 Perfs @ 2,825' - set CICR @ 2,787' – attempt to establish injection below retainer – pressure out at 1100 psi – no break, no injection rate – spot 12sx cmt on top of retainer (WOC – tag 2610' – tag witnessed by BLM rep)

**Plug 1 (PC/FC/Kirtland) CICR Set @ 3,082' – attempt to establish inj below retainer, pressure out at 1000 psi – no inj rate established below retainer - spot 18sx cmt on top of retainer (WOC - tag TOC 2830' – Tag witnessed by BLM rep)**

<u>NMOCD Record or MSOgeology</u>	
Nacimiento –	x,xxx' or 1,500'
Ojo Alamo –	2,772' or 2,799'
Kirtland –	3,012' or x,xxx'
Fruitland –	3,078' or 3,012'
Picture Cliffs –	3,113' or 3,112'

**Picture Cliffs Perfs (1962):**  
 Perfs 3,117' – 3139' (2spf)

**PBTD: 3,182'**







AZTEC WELL SERVICING CO.

CEMENT JOB DETAIL SHEET

CUSTOMER: <b>MORNINGSTAR OPERATING, LLC.</b>	DATE: <b>October 13, 2023</b>	API Number: <b>30-039-05225</b>	TYPE OF JOB: <b>P &amp; A</b>
LEASE & WELL NAME: <b>HARRINGTON COM #7</b>	LOCATION: <b>Sec.32,T324N,R01W</b>	SERVICE SUP: <b>DEAN MESTAS</b>	
SERVICE CONTRACTOR: <b>RIG 450</b>	OPERATOR: <b>AZTEC WELL SERVICE</b>	COUNTY: <b>RIO ARRIBA</b>	STATE: <b>NEW MEXICO</b>

MATERIALS FURNISHED:	TYPE OF PLUGS:		LIST CSG. HARDWARE:	SQUEEZE MANIFOLD:	TOP OF EACH FLUID:	PHYSICAL SLURRY PROPERTIES:					
	TOP					SLURRY WEIGHT: Lb/gal	SLURRY YIELD: Cuft/sk	WATER REQ.: Gals/sk	PUMP TIME: hr:mm	SLURRY: bbls	MIX WATER: bbls
	BOTTOM										

<b>PRE-FLUSH - FRESH WATER</b>										
<b>Plug 1: Pumped 3.7bbls cement slurry ((18sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk))</b>	<b>2855'</b>	<b>15.80</b>	<b>1.15</b>	<b>5.00</b>				<b>3.7</b>	<b>2.1</b>	

AVAILABLE MIX WATER: <b>210.0</b> BBLs	AVAILABLE DISPLACEMENT WATER: <b>200.0</b> BBLs	TOTAL MIX WATER: <b>2.1</b>															
HOLE				TBG.-CSG.-D.P.				TBG.-CSG.-D.P.				COLLAR DEPTHS					
SIZE	% EXCESS	DEPTH	SIZE	WEIGHT	TYPE	DEPTH	SIZE	WEIGHT	TYPE	DEPTH	SHOE	FLOAT	STAGE				
12 1/4	100%	98'	8 5/8	24.00	J-55	98'	2-3/8"	4.70	J-55	3082'			0				
LAST CASING				PKR-CMT RET-BR PL-LINER				PERF DEPTHS				TOP CONNECTION		WELLBORE FLUID			
SIZE	WEIGHT	TYPE	DEPTH	BRAND & TYPE	DEPTH	TOP	BOTTOM	SIZE	THREAD	TYPE	WEIGHT						
4 1/2	9.50	J-55	3182'			3117'	3139'	2 3/8	8 ROUND	PRODUCED WATER	8.40						
CALCULATED DISPLACEMENT VOLUME; BBL				CAL. PSI		CAL. MAX PSI		OP. MAX		MAX TBG. PSI		MAX CASING PSI		DISPLACEMENT FLUID		WATER	
TUBING	CASING	CASING	TOTAL	BUMP PLUG	TO REVERSE	SQ. PSI	RATED	OPER	RATED	OPER	TYPE	WEIGHT	SOURCE				
						650				650	FRESH WATER	8.33	CITY WATER				

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CASING, ETC., PRIOR TO CEMENTING:

PUMP DETAILS:						DAILY SUMMARY:					
TIME	PRESSURE - PSI		RATE	BBL FLUID	FLUID	SAFETY MEETING: CREW <input checked="" type="checkbox"/>		CO. REP. <input checked="" type="checkbox"/>			
HR: MIN:	PIPE	ANNULUS	BPM:	PUMPED:	TYPE:	TEST LINES: PSI					
						CIRCULATED THE WELL: RIG PUMP <input type="checkbox"/> CMT PUMP <input checked="" type="checkbox"/>					
5:00	-	-	-	-	-	Travel to location					
7:00	-	-	-	-	-	Pre-Start Inspection, Service & Start equipment					
7:15	0	0/0	-	-	-	Check PSI on Well: Tbg = 0psi; Csg = 0psi; BH = 0psi.					
7:30	-	-	-	-	-	Continue to TOOH w/ tubing					
8:10	-	-	-	-	-	TIH w/ cement retainer & tubing to 3082'...set retainer successfully and sting out					
9:30	0	0	3.00	58.00	H2O	Pumped 58.0bbls water to load casing...shut in and test casing...NO test					
9:45	-	-	-	-	-	TOOH w/ tubing & stinger					
10:15	-	-	-	-	-	MIRU wireline services					
-	-	-	-	-	-	RIH w/ CBL tools and wireline to 3082'					
-	-	-	-	-	-	ROOH w/ wireline and perform CBL from 3082' to surface					
11:45	-	-	-	-	-	TIH w/ stinger & tubing to 3082'and sting into retainer					
12:50	1,000	0	2.00	2.50	H2O	Pumped 2.5bbls water to load tubing and establish injection rate...tubing pressure out to 1000psi...no inj. Rate est...STING out					
13:02	250	0	2.00	2.00	H2O	Pumped 2.0bbls water ahead					
13:15	250	0	2.00	3.70	CEMENT	Pumped 3.7bbls cement slurry ((18sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk))					
13:25	200	0	2.50	11.20	H2O	Pumped 11.2bbls water displacement... Estimated TOC @ 2855'					
13:30	-	-	-	-	-	SD...WOC 4hrs					
-	-	-	-	-	-	TOOH w tubing to 2830'					
13:45	0	250	3.00	65.00	H2O	Pumped 65.0bbls water to reverse circ. clean...during pump time BH started to circulate, hole on casing...had 0.5bbls cement ot pit					
-	-	-	-	-	-	SD...resume WOC					
14:00	-	-	-	-	-	TOOH w/ tubing & LD stinger					
14:45	-	-	-	-	-	Secure wellhead and equipment...SDON					
15:00	-	-	-	-	-	Travel to the yard					

BUMPED PLUG:	PSI TO BUMP PLUG:	TEST FLOAT EQUIPMENT:	TOTAL BBL PUMPED:	BBL CMT. RETURNS/ REVERSED:	PSI LEFT ON CSG.:	SPOT TOP CEMENT:	AZTEC WELL SERVICING CO REP.: <b>DEAN MESTAS</b>	CUSTOMER REP.: <b>JASON PEACE</b>
			142.4	0.5	0	2855'	CUSTOMER REP. SIGNATURE: _____	CUSTOMER AUTHORIZING AGENT







AZTEC WELL SERVICING CO.

CEMENT JOB DETAIL SHEET

CUSTOMER: <b>MORNINGSTAR OPERATING, LLC.</b>	DATE: <b>October 18, 2023</b>	API Number: <b>30-039-05225</b>	TYPE OF JOB: <b>P &amp; A</b>
LEASE & WELL NAME: <b>HARRINGTON COM #7</b>	LOCATION: <b>Sec.32,T324N,R01W</b>	SERVICE SUP: <b>DEAN MESTAS</b>	
SERVICE CONTRACTOR: <b>RIG 450</b>	OPERATOR: <b>AZTEC WELL SERVICE</b>	COUNTY: <b>RIO ARRIBA</b>	STATE: <b>NEW MEXICO</b>

MATERIALS FURNISHED:	TYPE OF PLUGS:		LIST CSG. HARDWARE:	SQUEEZE MANIFOLD:	TOP OF EACH FLUID:	PHYSICAL SLURRY PROPERTIES:					
	TOP					SLURRY WEIGHT: Lb/gal	SLURRY YIELD: Cuft/sk	WATER REQ.: Gals/sk	PUMP TIME: hr:mm	SLURRY: bbls	MIX WATER: bbls
	BOTTOM										

<b>PRE-FLUSH - FRESH WATER</b>										
<b>Plug 4: Pumped 18.5bbls cement slurry ((90sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk))</b>	Surface	15.80	1.15	5.00				18.5	10.7	
<b>Top off: Pumped 3.1bbls cement slurry ((15sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk)) to top off casing &amp; fill cellar</b>	Surface	15.80	1.15	5.00				3.1	1.8	

AVAILABLE MIX WATER: <b>210.0</b> BBLs	AVAILABLE DISPLACEMENT WATER: <b>200.0</b> BBLs	TOTAL MIX WATER: <b>12.5</b>															
HOLE				TBG.-CSG.-D.P.				TBG.-CSG.-D.P.				COLLAR DEPTHS					
SIZE	% EXCESS	DEPTH		SIZE	WEIGHT	TYPE	DEPTH	SIZE	WEIGHT	TYPE	DEPTH	SHOE	FLOAT	STAGE			
12 1/4	100%	98'		8 5/8	24.00	J-55	98'	2 3/8	4.70	J-55	169'			0			
LAST CASING				PKR-CMT RET-BR PL-LINER				PERF DEPTHS				TOP CONNECTION			WELLBORE FLUID		
SIZE	WEIGHT	TYPE	DEPTH	BRAND & TYPE	DEPTH			TOP	BOTTOM			SIZE	THREAD		TYPE	WEIGHT	
4 1/2	9.50	J-55	3182'					3117'	3139'			2 3/8	8 ROUND		PRODUCED WATER	8.40	
CALCULATED DISPLACEMENT VOLUME; BBL				CAL. PSI		CAL. MAX PSI		OP. MAX		MAX TBG. PSI		MAX CASING PSI		DISPLACEMENT FLUID		WATER	
TUBING	CASING	CASING	TOTAL	BUMP PLUG	TO REVERSE	SQ. PSI	RATED	OPER	RATED	OPER	RATED	OPER	RATED	OPER	TYPE	WEIGHT	SOURCE
						650		650		1,100		650			FRESH WATER	8.33	CITY WATER

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CASING, ETC., PRIOR TO CEMENTING:

PUMP DETAILS:							DAILY SUMMARY:						
TIME	PRESSURE - PSI		RATE	BBL FLUID	FLUID		SAFETY MEETING: CREW <input checked="" type="checkbox"/>		CO. REP. <input checked="" type="checkbox"/>				
HR: MIN:	PIPE	ANNULUS	BPM:	PUMPED:	TYPE:		TEST LINES: PSI						
							CIRCULATED THE WELL: RIG PUMP <input type="checkbox"/> CMT PUMP <input checked="" type="checkbox"/>						
5:30	-	-	-	-	-	-	Travel to location						
6:45	-	-	-	-	-	-	Pre-Start Inspection, Service & Start equipment						
7:00	0	0/0	-	-	-	-	Check PSI on Well: Tbg = 0psi; Csg = 0psi; BH = 0psi.						
7:30	-	-	-	-	-	-	TIH w/ tubing to tag top of cement...Tagged TOC at 1401',witnessed by BLM						
7:54	-	-	-	-	-	-	TOOH & LD tubing						
8:20	-	-	-	-	-	-	RU wireline service to perforate casing						
-	-	-	-	-	-	-	RIH w/ perf gun and wireline to perf depth of 148',perforated casing successfully						
-	-	-	-	-	-	-	ROOH w/ wireline & LD perf gun...verified all shots fired...shut in and prepare to establish injection rate from surface						
8:42	-	-	-	-	-	-	TIH w/ tubing to 169'						
8:54	0	150	2.00	16.00	H2O		Pumped 8.5bbls to load & circulate thru BH successfully						
9:10	0	100	2.00	2.00	H2O		Pumped 2.0bbls fresh water ahead						
9:30	0	100	2.00	23.60	CEMENT		Pumped 18.5bbls cement slurry ((90sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk))...circulated 2.0bbls good cement to surface						
9:45	-	-	-	-	-	-	SD						
-	-	-	-	-	-	-	MIRU welder...cut wellhead off...had cement to surface on both casings						
-	-	-	-	-	-	-	Install dryhole marker						
-	25	0	1.00	3.10	CEMENT		Pumped 3.1bbls cement slurry ((15sx; 15.8ppg, 1.15cuft/ft, 5.0gals/sk)) to top off & fill cellar						
-	-	-	-	-	-	-	SD...end of well						
13:30	-	-	-	-	-	-	Travel to the yard						

BUMPED PLUG:	PSI TO BUMP PLUG:	TEST FLOAT EQUIPMENT:	TOTAL BBL PUMPED:	BBL CMT. RETURNS/ REVERSED:	PSI LEFT ON CSG.:	SPOT TOP CEMENT:	AZTEC WELL SERVICING CO REP.: <b>DEAN MESTAS</b>	CUSTOMER REP.: <b>JASON PEACE</b>
			44.7	2.0	0	Surface	CUSTOMER REP. SIGNATURE:	CUSTOMER AUTHORIZING AGENT

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
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**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 279757

**CONDITIONS**

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 279757
	Action Type: [C-103] Sub. Plugging (C-103P)

**CONDITIONS**

Created By	Condition	Condition Date
mkuehling	well plugged 10/18/2023	10/27/2023