

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

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.

5. Lease Serial No.
NMNM15295

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Riddle Engineering Corp. (OGRID 371172)

3a. Address
PO BOX 270130, CORPUS CHRISTI TX 78427-0130

3b. Phone No. (include area code)
361-452-2703 main, 361-813-1895 cell

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.
CK 7 FEDERAL NO. 2

9. API Well No.
30-015-33421

10. Field and Pool or Exploratory Area
Carlsbad; Atoka, South (Gas)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2450' FNL & 1415' FEL, SEC 7, T24S, R26E

11. Country or Parish, State
EDDY

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"/> Fracture Treat	<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 recomplete 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.)

RECOMPLETE UPHOLE INTO ATOKA

- Pull out of hole and lay down 2 3/8" openended tubing.
- Run in hole with 2 7/8" 6.5 ppf L80 EUE tubing as inner casing to 11,380' (current plug back total depth).
- Cement 2 7/8" casing in 5 1/2" casing with sufficient volume such that calculated cement top is at 3000' (to cover part in 5 1/2" casing at 3508')
- Run gamma ray/neutron/cement bond/correlation log. *Submit CBL to BLM*
- Perforate Atoka at 11318' to 11319' 11320', 11315' to 11316', 11307' to 11309', 11299', 11300' to 11301', 11289' to 11291', 11281' to 11284', 11248' to 11250'.
- Swab fluid out of tubing and test well. Acidize if necessary.
- If commercial, initiate gas sales.
- If non-commercial, perforate Atoka at 11006', 11007' to 11010' and 10879 - 10892'.
- Swab fluid out of tubing and test well. Acidize if necessary.
- If commercial, initiate gas sales.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NM OIL CONSERVATION
ARTESIA DISTRICT

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

Name (Printed/Typed)

EDUARDO A RIDDLE

Title PRESIDENT

MAR 08 2017

Signature

Eduardo A Riddle

Date 02/06/2017

RECEIVED

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

[Signature]

Title Eng

Date

3/1/17

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 C/O

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.

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
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-33421	² Pool Code 73800	³ Pool Name CARLSBAD; ATOKA, SOUTH (GAS)
⁴ Property Code 34014	⁵ Property Name CK 7 FEDERAL	⁶ Well Number 002
⁷ OGRID No. 371172	⁸ Operator Name RIDDLE ENGINEERING CORP.	⁹ Elevation 3758'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	7	24S	26E		2520	NORTH	1415	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	7	24S	26E		1526	SOUTH	1238	EAST	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <u>Eduardo A. Riddle</u> 02/06/2017 Signature Date EDUARDO A RIDDLE Printed Name e.a.riddle@riddle-eng.com E-mail Address
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

RKB: 169 ft
GL: 150 ft
Logged from KB: 19 ft above PD

CK 7 Federal No. 2

December 28, 2016

Well Name & Number

Date (Last Modified)

30-015-33421

API No.

Eddy County, NM

Modified By: E Riddle

County

WELLHEAD

7 1/16" 5M X 2 3/8" API

11" 5M X 7 1/16" 5M

11" 5M X 11" 5M Spool

COMPLETIONS

PREPARED FROM NOTES PROVIDED BY CIMAREX ENERGY

WELLBORE

13 3/8", 54.5#, J-55 @ 397'

Cmt'd w/ 765 sx, 1" to surface

9 5/8", 40 ppf, NS-110 @ 1912'

Cmt'd w/ 1200 sx, 1" to surface

TOC @ 2295' w/ Temperature Log

Hole in 5 1/2" @ 3508'

DV Tool @ 7014'

Cmt'd w/ 1450 sx

353 jts of 2 3/8" 4.7 ppf L80 EUE tbq w/1.875" SN & tbq collar on btm

EOT @ 11,232'

TOC 11,380'

CIBP @ 11,752'

Morrow Perfs (11,820 - 11,832')

Morrow Perfs (11,884 - 11,898')

CIBP @ 11,920'

Morrow Perfs (11,926 - 11,932')

TOC @ 12,000'

CIBP @ 12,020'

Morrow Perfs (12,026 - 12,044')

TOC @ 12,073'

CIBP @ 12,090'

Morrow Perfs (12,132 - 12,220')

PBTD @ 12,227'

5 1/2", 17 ppf, N-80 & P-110 @ 12,329'

Cmt'd w/ 995 sx

TD - 12,329'



RKB: 169 ft
GL: 150 ft
Logged from KB: 19 ft above PD

WELLHEAD

7 1/16" 5M X 2 3/8" API
11" 5M X 7 1/16" 5M
11" 5M X 11" 5M Spool

WELLBORE

13 3/8", 54.5#, J-55 @ 397'
Cmt'd w/ 765 sx, 1" to surface

9 5/8", 40 ppf, NS-110 @ 1912'
Cmt'd w/ 1200 sx, 1" to surface

TOC behind 5 1/2" @ 2295' w/ Temperature Log

Calculated TOC behind 2 7/8" @ 3000'

DV Tool @ 7014'
Cmt'd w/ 1450 sx

2 7/8" 6.5 ppf L80 EUE @ 11,380'

5 1/2", 17 ppf, N-80 & P-110 @ 12,329'
Cmt'd w/ 995 sx

TD - 12,329'

PROPOSED WELLBORE SCHEMATIC

CK 7 Federal No. 2

February 3, 2017

Well Name & Number

Date (Last Modified)

30-015-33421

API No.

Eddy County, NM

County

Modified By: E Riddle

COMPLETIONS

Hole in 5 1/2" @ 3508'

2nd attempt

Proposed Atoka perms (10,879 - 10,892')

Proposed Atoka perms (11,006 - 11,010')

1st attempt

Proposed Atoka Perfs (11,250 - 11,320')

CIBP @ 11,752'

Morrow Perfs (11,820 - 11,832')

Morrow Perfs (11,884 - 11,898')

CIBP @ 11,920'

Morrow Perfs (11,926 - 11,932')

TOC @ 12,000'

CIBP @ 12,020'

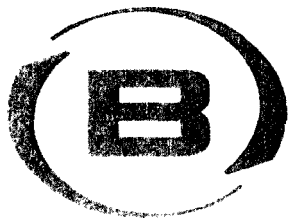
Morrow Perfs (12,028 - 12,044')

TOC @ 12,073'

CIBP @ 12,090'

Morrow Perfs (12,132 - 12,220')

PBTD @ 12,227'



BASICSM
ENERGY SERVICES

Wadi Petroleum

C&K 7 Federal

2

County/State Eddy, TX

Legal Loc. --

**Set 2 7/8" 6.5# Casing In 5 1/2" 17# Casing @
11,380'**

Terms:

Prepared for Ed Riddle

Phone Number:

Email Address: e.a.riddle@riddle-eng.com

Email Address: Aldo.Mendoza@Basicenergyservices.com

Prepared by Aldo Mendoza

Basic Energy Services Inc.

432-557-2370

Service Point: Midland , TX.

Contact Person: Aldo Mendoza

432-687-1994

Cement Callsheet



BASIC
ENERGY SERVICES

Company	Wadi Petroleum		Service Point	Midland , TX.	
Well Type	Contractor	County	Contact Person	Aldo Mendoza	Ph # 432-687-1994
Lease	C&K 7 Federal	Well # 2	Sec	Eddy	State TX
Directions:	Range				

15 MI SW of Carlsbad, NM on 62/180

Job Type	Liner	Casing Size	2 7/8	Thread	Weight
Equipment		Tubing/Drill Pipe Size		Thread	Weight
		Hole Size	4 8/9	Packer	Bridge Plug
Terms:		Plug Container	Yes	Squeeze Manifold	Field Bin

Set 2 7/8" 6.5# Casing In 5 1/2" 17# Casing @ 11,380'

CEMENT DATA

LEAD 1	Weight PPG	Type	Additives	
Sacks	Excess	Yield Ft ³ /sk	Water Gal/sk	
TAIL 1	Weight PPG	Type	Additives	
CCT103	14.20	50/50 POZ with Class H Cement	2% Gel + 5% Salt + 1/4pps Celloflake + 4/10% C-15 + 4/10% C-41P + 3/10 C-37 + 1/10% C-20	
Sacks 560	Excess	Yield Ft ³ /sk 1.29	Water Gal/sk 5.85	
LEAD 2	Weight PPG	Type	Additives	
Sacks	Excess	Yield Ft ³ /sk	Water Gal/sk	
TAIL 2	Weight PPG	Type	Additives	
Sacks	Excess	Yield Ft ³ /sk	Water Gal/sk	
Mouse/Rat	Weight PPG	Type	Additives	
Sacks	Excess	Yield Ft ³ /sk	Water Gal/sk	
Plugs	Weight PPG	Type	Additives	
Sacks	Excess	Yield Ft ³ /sk	Water Gal/sk	

Float Equipment

Part #	Quantity	Description	# Used	# Returned
CF101	1	Top Rubber Cement Plug, 2 7/8"		

Misc. Chemicals

Ordered By	Ed Riddle	Phone	432-557-2370	Email	e.a.riddle@riddle	Date of Job	
Call Taken By	Aldo Mendoza	Phone	432-557-2370	Email	Aldo.Mendoza@	Time Ready	
Operator or Driver Called						Call Out Time	

• Wadi Petroleum

C&K 7 Federal # 2

County/State Eddy, TX

Terms:

Set 2 7/8" 6.5# Casing In 5 1/2" 17# Casing @ 11,380'



BASIC
ENERGY SERVICES

Well Data and Calculations

	Lead 1 Cement	Tail 1 Cement	Lead 2 Cement	Tail 2 Cement	Top Out Cement	Plug Cement
Well Type:						
Job Type:	Liner	Liner	Liner	Liner	Liner	
Cement Weight PPG :		14.20				
Hole Size:	4.892	4.892	4.892	4.892		
Casing Size:	2.875	2.875	2.875	2.875		
Bottom of Cement:	3000	11380				
Top of Cement:		3000				
Percent Excess:						
Annulus Cal: (bbl/ft)	0.0152	0.0152	0.0152	0.0152		
Annulus Cal: (cft/ft)	0.0854	0.0854	0.0854	0.0854		
Annulus Vol: (ft/cft)	11.7037	11.7037	11.7037	11.7037		
Annulus Vol: cft	256.31	715.96				
Annulus Vol: ft	2999.79	8379.40				
Fluid Yield: cft/sk	1.32	1.29	1.32	1.32	1.32	1.32
Annular Vol.bbls	45.65	173.18				
Slurry Volume: bbls	45.65	127.51				
Fluid Water Ratio: gal/sk	6.31	5.85	6.31	6.31	6.31	6.31
Shoe Length: Ft.		33				
Shoe Calculation: bbl/ft		0.0232				
Pipe ID:Inches		4.8920				
Shoe Volume: bbls		0.77				
Shoe Volume: cft		4.31				
Cement Plus shoe: cft	256.31	720.27				
Cement Plus shoe: bbls	45.65	128.28				
Total mixing Water: bbls	29.17	77.77				
Displacement: bbls		264.55				
Calculated cement: Sk	194.18	558.35				
Total water required: bbls	29.17	342.32				

Cement Recommendations

Lead 1 Cement			
Tail 1 Cement	560	50/50 POZ with Class H Cement	560 sks
Lead 2 Cement			
Tail 2 Cement			
Top Out Cement			
Plug Cement			
Total:			560

Float Equipment

Top Rubber Cement Plug, 2 7/8"	1 ea
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Misc. Chemicals

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. Plugging operations shall commence within **ninety (90)** days from this approval.

If you are unable to plug back the well by the 90th day provide this office, prior to the 90th 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. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth.**

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 and Completion Report:** 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 and supply current wellbore diagram.**

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.