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

Sundry Print Report

09/19/2023

Well Name: PHANTOM BANK 31 FED

Well Location: T26S / R31E / SEC 32 / LOT D / 32.00452 / -103.807626

County or Parish/State: EDDY / NM

Well Number: 502H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM138868

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001546755

Well Status: Producing Oil Well

Operator: FLAT CREEK RESOURCES LLC

Notice of Intent

Sundry ID: 2156586

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 04/13/2021

Time Sundry Submitted: 08:39

Date proposed operation will begin: 05/10/2021

Procedure Description: Change the surface location on the same pad, change the bottom hole location, and change the formation drilled. Revised the casing and cementing programs.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Phantom_Bank_31_Fed_Com_Pad_1_SUP_New_R1_Cert_4_12_21_20210413083909.pdf

Phantom_Bank_31_Fed_Com_Pad_1_No.502H__Well_Plat_Cert_4_12_21_20210413083900.pdf

Phantom_Bank_31_Fed_Com_Pad_1_No.502H__Road_Plat_Cert_4_12_21_20210413083848.pdf

PHANTOM_BANK_31_FED_COM_502H_C_102_New_R_Cert_4_12_21_20210413083755.pdf

ULTRA____DQX_5.000_0.362_P110_03122021__1__20210412144038.pdf

5.5_x_20__.361__USS_RYS110_USS_TALON_HTQ_RD5.900_03_11_21_20210412144027.pdf

Casing_Design_Sheet_20210412143908.xlsx

Compass_Cementing_Program_revised_20210412143759.pdf

Well Name: PHANTOM BANK 31 FED	**Well Location:** T26S / R31E / SEC 32 / LOT D / 32.00452 / -103.807626	**County or Parish/State:** EDDY / NM
Well Number: 502H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM138868	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number: 3001546755	**Well Status:** Producing Oil Well	**Operator:** FLAT CREEK RESOURCES LLC

502H_Directional_Plan_20210412143729.xlsx

502H_Formation_Tops_20210412143717.xlsx

Sundry_502H_Surface_Use_Plan_of_Operations_20210412143704.docx

Sundry_502H_Produced_Water_Disposal_20210412143656.docx

Sundry_502H_Drilling_Plan_20210412143647.docx

Sundry_502H_Application_20210412143636.docx

Conditions of Approval

Additional

Phantom_Bank_31_Fed_Com_502H_Sundry_ID_2156586_20210414084827.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: RODNEY LITTLETON **Signed on:** APR 13, 2021 08:43 AM

Name: FLAT CREEK RESOURCES LLC

Title: Vice President – Operations

Street Address: 777 Main Street, Suite 3600

City: Fort Worth **State:** TX

Phone: (817) 310-8578

Email address: rodney.littleton@flatcreekresources.com

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS **BLM POC Title:** Petroleum Engineer

BLM POC Phone: 5752342234 **BLM POC Email Address:** cwalls@blm.gov

Disposition: Approved **Disposition Date:** 04/14/2021

Signature: CHRIS WALLS

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

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

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 perfonned 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 detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

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)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: LOT D / 650 FNL / 300 FWL / TWSP: 26S / RANGE: 31E / SECTION: 32 / LAT: 32.004257 / LONG: -103.807475 (TVD: 9334 feet, MD: 14770 feet)

PPP: LOT L1 / 698 FNL / 100 FEL / TWSP: 26S / RANGE: 31E / SECTION: 31 / LAT: 32.004248 / LONG: -103.808765 (TVD: 9273 feet, MD: 9300 feet)

BHL: LOT L1 / 698 FNL / 30 FWL / TWSP: 26S / RANGE: 31E / SECTION: 31 / LAT: 32.004113 / LONG: -103.826026 (TVD: 9334 feet, MD: 14840 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Flat Creek Resources LLC**
LEASE NO.:	**NMNM138868**
WELL NAME & NO.:	Phantom Bank 31 Fed Com 502H
SURFACE HOLE FOOTAGE:	600'/N & 400'/W
BOTTOM HOLE FOOTAGE	822'/N & 100'/W
LOCATION:	Section 32, T.26 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

COA

H2S	☐ Yes	☒ No	
Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☐ Low	☒ Medium	☐ High
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	☐ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☑ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **675 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 10-3/4" X 7-5/8" annulus. Operator must run a CBL from TD of the 7-5/8" casing to surface. Submit results to BLM.

3. The minimum required fill of cement behind the production casing is:

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

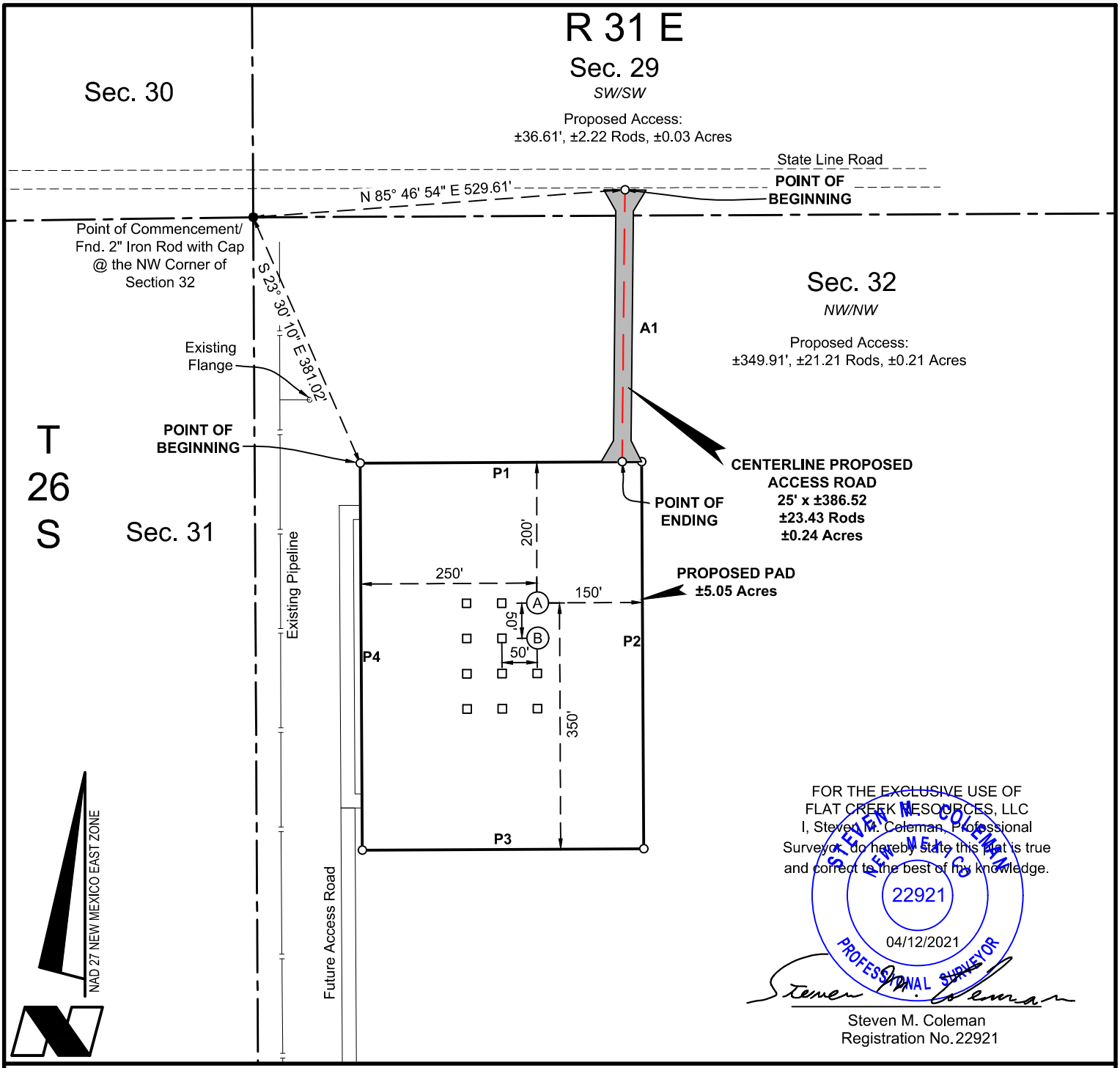
C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.



FOR THE EXCLUSIVE USE OF
FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
NEW MEXICO
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No. 22921

SURFACE USE PLAT

Scale: 1" = 200'

200' 0 100' 200'

Page 1 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NORTH PAD
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: KJD	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	DMB	04/06/2021	Revise access and wells
DATE: 09/05/2019				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 SUP_New.dwg				

NW PAD CORNER			NE PAD CORNER		
X=	662,855	NAD 27	X=	663,255	NAD 27
Y=	365,972		Y=	365,974	
LAT.	32.005082 N		LAT.	32.005082 N	
LONG.	103.807960 W		LONG.	103.806669 W	
X=	704,042	NAD83/86	X=	704,442	NAD83/86
Y=	366,029		Y=	366,031	
LAT.	32.005207 N		LAT.	32.005207 N	
LONG.	103.808434 W		LONG.	103.807143 W	
ELEV.	+3,129'	NAVD88	ELEV.	+3,135'	NAVD88
SW PAD CORNER			SE PAD CORNER		
X=	662,858	NAD 27	X=	663,258	NAD 27
Y=	365,422		Y=	365,424	
LAT.	32.003570 N		LAT.	32.003570 N	
LONG.	103.807958 W		LONG.	103.806668 W	
X=	704,045	NAD83/86	X=	704,445	NAD83/86
Y=	365,479		Y=	365,481	
LAT.	32.003695 N		LAT.	32.003695 N	
LONG.	103.808432 W		LONG.	103.807142 W	
ELEV.	+3,120'	NAVD88	ELEV.	+3,125'	NAVD88

POINT OF BEGINNING ACCESS ROAD			POINT OF ENDING ACCESS ROAD		
X=	663,231'	NAD 27	X=	663,227'	NAD 27
Y=	366,360'		Y=	365,973'	
LAT.	32.006144° N		LAT.	32.005082° N	
LONG.	103.806740° W		LONG.	103.806759° W	
X=	704,418'	NAD83/86	X=	704,414'	NAD83/86
Y=	366,417'		Y=	366,031'	
LAT.	32.006270° N		LAT.	32.005207° N	
LONG.	103.807214° W		LONG.	103.807233° W	

PROPOSED PAD		
COURSE	BEARING	DISTANCE
P1	N 89° 42' 47" E	400.00'
P2	S 00° 19' 09" E	550.00'
P3	S 89° 42' 47" W	400.00'
P4	N 00° 19' 09" W	550.00'

PROPOSED ACCESS ROAD		
COURSE	BEARING	DISTANCE
A1	S 00° 35' 32" W	386.52'

(A) PHANTOM BANK 31 FED COM NO. 506H WELL		
X=	663,106'	NAD 27
Y=	365,773'	
LAT.	32.004532° N	
LONG.	103.807153° W	
X=	704,293'	NAD83/86
Y=	365,830'	
LAT.	32.004657° N	
LONG.	103.807627° W	
ELEV.	+3,135'	NAVD88
CALLS	550' FNL / 400' FWL	

(B) PHANTOM BANK 31 FED COM NO. 502 WELL		
X=	663,106'	NAD 27
Y=	365,723'	
LAT.	32.004395° N	
LONG.	103.807152° W	
X=	704,293'	NAD83/86
Y=	365,780'	
LAT.	32.004520° N	
LONG.	103.807626° W	
ELEV.	+3,130'	NAVD88
CALLS	600' FNL / 400' FWL	

FOR THE EXCLUSIVE USE OF
FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No. 22921

DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

NOTE:
Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

NOTE:
Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nm811.org.

SURFACE USE PLAT

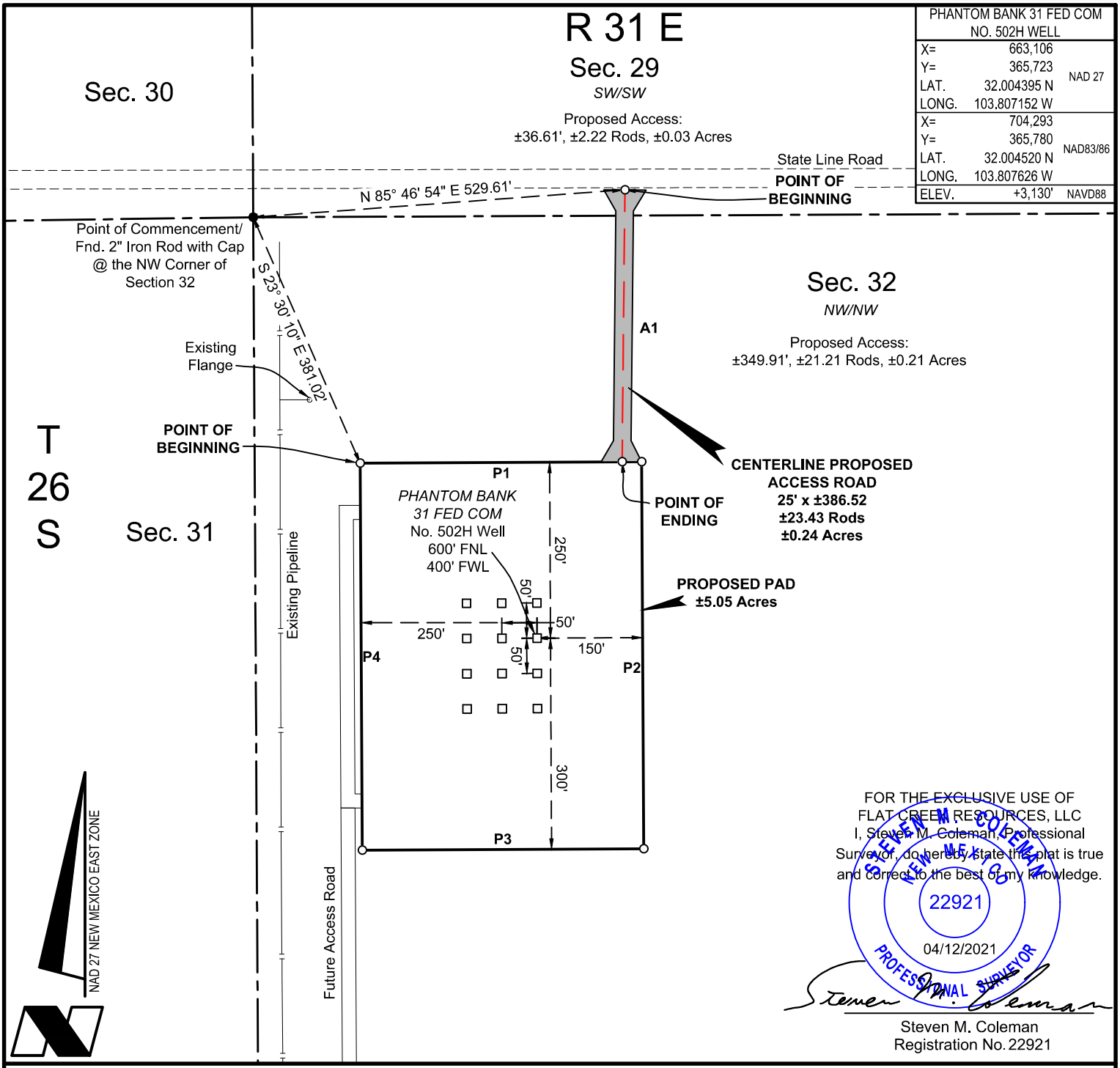
Page 2 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NORTH PAD
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: KJD	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	DMB	04/06/2021	Revise access and wells
DATE: 09/05/2019				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 SUP_New.dwg				



PHANTOM BANK 31 FED COM NO. 502H WELL		
X=	663,106	NAD 27
Y=	365,723	
LAT.	32.004395 N	
LONG.	103.807152 W	
X=	704,293	NAD83/86
Y=	365,780	
LAT.	32.004520 N	
LONG.	103.807626 W	
ELEV.	+3,130'	NAVD88

FOR THE EXCLUSIVE USE OF FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN NEW MEXICO 22921 PROFESSIONAL SURVEYOR
04/12/2021

Steven M. Coleman
Registration No. 22921

WELL PLAT

Scale: 1" = 200'
200' 0 100' 200'

Page 1 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NO. 502H WELL
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 04/12/2021				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 No.502H_ Well Plat.dwg				

NW PAD CORNER			NE PAD CORNER		
X=	662,855	NAD 27	X=	663,255	NAD 27
Y=	365,972		Y=	365,974	
LAT.	32.005082 N		LAT.	32.005082 N	
LONG.	103.807960 W		LONG.	103.806669 W	
X=	704,042	NAD83/86	X=	704,442	NAD83/86
Y=	366,029		Y=	366,031	
LAT.	32.005207 N		LAT.	32.005207 N	
LONG.	103.808434 W		LONG.	103.807143 W	
ELEV.	+3,129'	NAVD88	ELEV.	+3,135'	NAVD88
SW PAD CORNER			SE PAD CORNER		
X=	662,858	NAD 27	X=	663,258	NAD 27
Y=	365,422		Y=	365,424	
LAT.	32.003570 N		LAT.	32.003570 N	
LONG.	103.807958 W		LONG.	103.806668 W	
X=	704,045	NAD83/86	X=	704,445	NAD83/86
Y=	365,479		Y=	365,481	
LAT.	32.003695 N		LAT.	32.003695 N	
LONG.	103.808432 W		LONG.	103.807142 W	
ELEV.	+3,120'	NAVD88	ELEV.	+3,125'	NAVD88

POINT OF BEGINNING ACCESS ROAD			POINT OF ENDING ACCESS ROAD		
X=	663,231'	NAD 27	X=	663,227'	NAD 27
Y=	366,360'		Y=	365,973'	
LAT.	32.006144° N		LAT.	32.005082° N	
LONG.	103.806740° W		LONG.	103.806759° W	
X=	704,418'	NAD83/86	X=	704,414'	NAD83/86
Y=	366,417'		Y=	366,031'	
LAT.	32.006270° N		LAT.	32.005207° N	
LONG.	103.807214° W		LONG.	103.807233° W	

PROPOSED ACCESS ROAD		
COURSE	BEARING	DISTANCE
A1	S 00° 35' 32" W	386.52'

PROPOSED PAD		
COURSE	BEARING	DISTANCE
P1	N 89° 42' 47" E	400.00'
P2	S 00° 19' 09" E	550.00'
P3	S 89° 42' 47" W	400.00'
P4	N 00° 19' 09" W	550.00'

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FOR THE EXCLUSIVE USE OF
FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
NEW MEXICO
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No. 22921

WELL PLAT

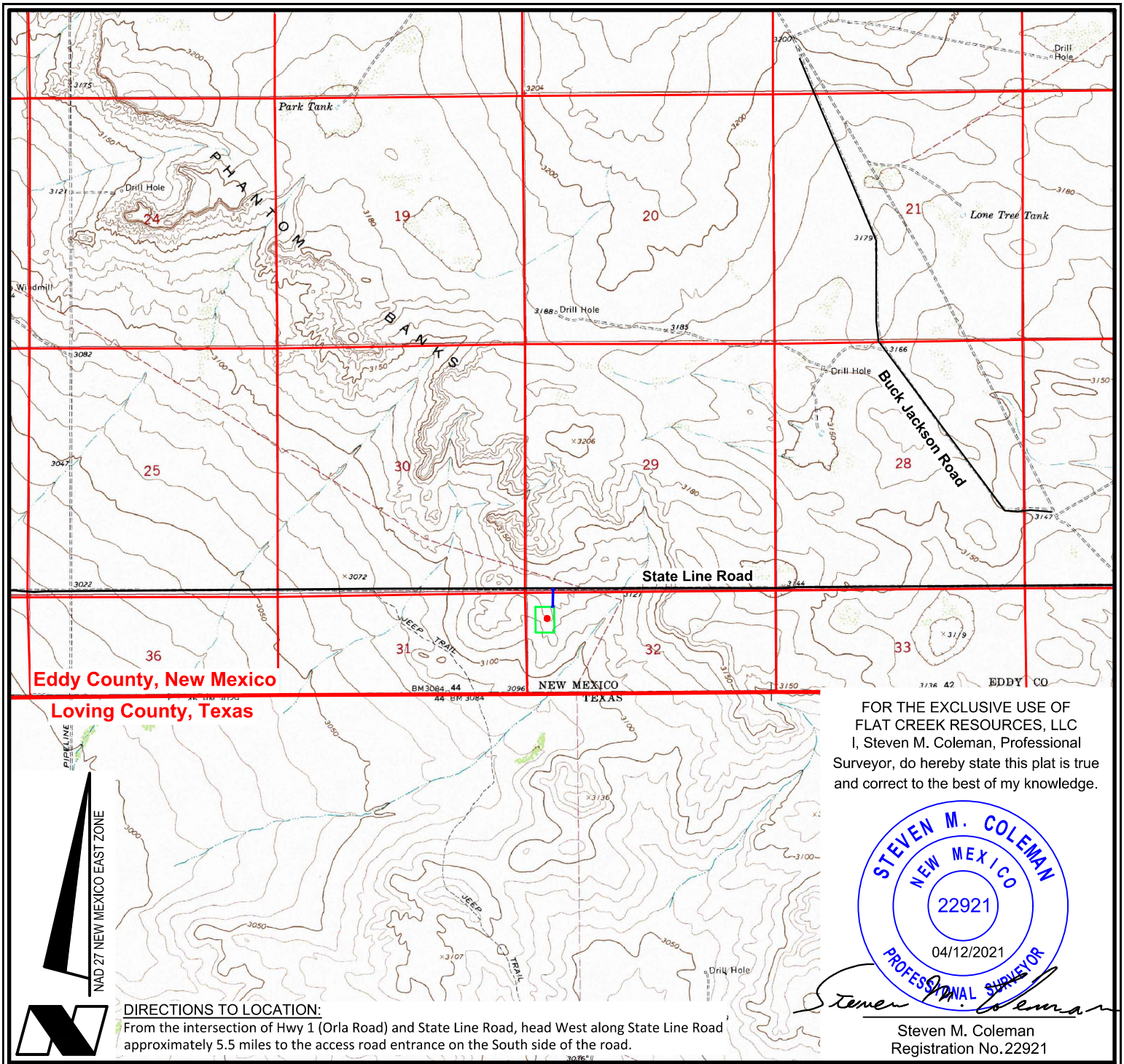
Page 2 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NO. 502H WELL
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 04/12/2021				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 No.502H_ Well Plat.dwg				



DIRECTIONS TO LOCATION:
From the intersection of Hwy 1 (Orla Road) and State Line Road, head West along State Line Road approximately 5.5 miles to the access road entrance on the South side of the road.

FOR THE EXCLUSIVE USE OF FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
NEW MEXICO
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No.22921

ROAD PLAT

Scale: 1" = 3000'
3000' 0 1500' 3000'

LEGEND
- Proposed Well
- Proposed Access Road
- Proposed Drillsite
- Existing Road
- Section Line
- Township & Range

FLAT CREEK RESOURCES, LLC
PHANTOM BANK 31 FED COM NO. 502H WELL
LOCATED 600' FNL AND 400' FWL
SECTION 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 04/12/2021				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 No.502H_ Road Plat.dwg				

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	[2] Pool Code	[3] Pool Name
	97814	PURPLE SAGE: WOLFCAMP

[4] Property Code	[5] Property Name	[6] Well Number
	PHANTOM BANK 31 FED COM	502H

[7] OGRID No.	[8] Operator Name	[9] Elevation
	FLAT CREEK RESOURCES, LLC	3130'

[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
D	32	26 SOUTH	31 EAST, N.M.P.M.		600'	NORTH	400'	WEST	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
L1	31	26 SOUTH	31 EAST, N.M.P.M.		822'	NORTH	100'	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
264.48			

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]

PROPOSED LAST TAKE POINT		
X=	657,704'	NAD 27
Y=	365,428'	
LAT.	32.003654° N	
LONG.	103.824583° W	
X=	698,891'	NAD83/86
Y=	365,485'	
LAT.	32.003780° N	
LONG.	103.825058° W	

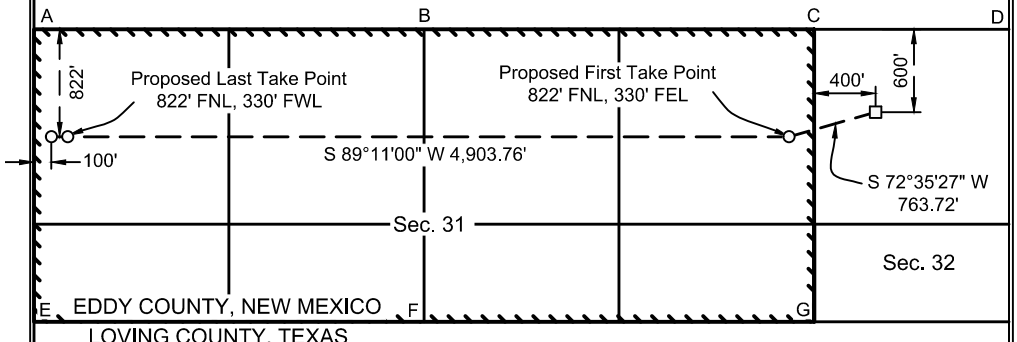
PROPOSED BOTTOM HOLE LOCATION		
X=	657,474'	NAD 27
Y=	365,424'	
LAT.	32.003648° N	
LONG.	103.825325° W	
X=	698,661'	NAD83/86
Y=	365,482'	
LAT.	32.003774° N	
LONG.	103.825800° W	

CORNER COORDINATES TABLE (NAD 27)

A - Y=366245.06, X=657370.11
B - Y=366283.60, X=660040.51
C - Y=366321.04, X=662703.16
D - Y=366332.89, X=665368.25
E - Y=364109.66, X=657381.51
F - Y=364123.23, X=660052.17
G - Y=364137.17, X=662715.32

PROPOSED FIRST TAKE POINT		
X=	662,378'	NAD 27
Y=	365,494'	
LAT.	32.003776° N	
LONG.	103.809507° W	
X=	703,565'	NAD83/86
Y=	365,551'	
LAT.	32.003902° N	
LONG.	103.809981° W	

PHANTOM BANK 31 FED COM NO. 502H WELL		
X=	663,106'	NAD 27
Y=	365,723'	
LAT.	32.004395° N	
LONG.	103.807152° W	
X=	704,293'	NAD83/86
Y=	365,780'	
LAT.	32.004520° N	
LONG.	103.807626° W	
ELEV.	+3130'	NAVD88



[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.

Rodney Littleton 04/13/2021
Signature Date

Rodney Littleton
Printed Name

rodney.littleton@flatcreekresources.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.

02/26/2019
Date of Survey

Signature and Seal of Professional Surveyor:

STEVEN M. COLEMAN
NEW MEXICO
22921
PROFESSIONAL SURVEYOR
04/12/2021

Certificate Number

Tenaris

ULTRA™ DQX

Coupling	Pipe Body
Grade: **P110**	Grade: **P110**
Body: **White**	1st Band: **White**
1st Band: **-**	2nd Band: **-**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.000 in.	**Wall Thickness**	0.362 in.	**Grade**	P110
Min. Wall Thickness	87.50 %	**Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.000 in.	**Wall Thickness**	0.362 in.	**Body Yield Strength**	580 x1000 lb
Nominal Weight	18 lb/ft	**Plain End Weight**	17.95 lb/ft	**Min. Internal Yield Pressure**	13,940 psi
Drift	4.151 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Set Drift	4.151 in.			**Collapse Pressure**	13,470 psi
Nominal ID	4.276 in.				

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.800 in.	**Tension Efficiency**	100 %	**Minimum**	9800 ft-lb
Coupling Length	8.194 in.	**Joint Yield Strength**	580 x1000 lb	**Optimum**	10,900 ft-lb
Connection ID	4.276 in.	**Internal Pressure Capacity**	13,940 psi	**Maximum**	12,000 ft-lb
Make-up Loss	4.097 in.	**Compression Efficiency**	100 %		
Threads per inch	5	**Compression Strength**	580 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	101 °/100 ft	**Operating Torque**	14,900 ft-lb
				Yield Torque	17,500 ft-lb

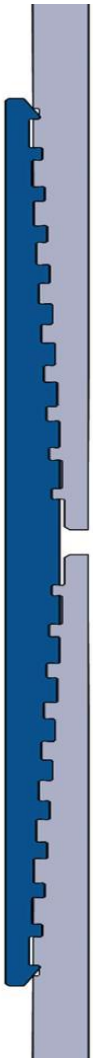
Notes

For the lastest performance data, always visit our website: www.tenaris.com

Generated: 3/11/2021

U. S. Steel Tubular Products

5.500 20.00 (0.361) USS RYS110 USS-TALON HTQ™ RD5.900



	Pipe	Connection		
MECHANICAL PROPERTIES				
Minimum Yield Strength	**110,000**		*psi*	[6]
Maximum Yield Strength	**125,000**		*psi*	[6]
Minimum Tensile Strength	**120,000**		*psi*	[6]
DIMENSIONS				
Outside Diameter	**5.500**	**5.900**	*in.*	
Wall Thickness	0.361		*in.*	
Inside Diameter	4.778	4.778	*in.*	
Drift - API	4.653		*in.*	
Nominal Linear Weight, T&C	**20.00**		*lb/ft*	
Plain End Weight	19.83	19.83	*lb/ft*	
SECTION AREA				
Cross Sectional Area | Critical Area	5.828	5.828	*sq. in.*	
Joint Efficiency		100.0	%	[2]
PERFORMANCE				
Minimum Collapse Pressure	11,100	11,100	*psi*	
Minimum Internal Yield Pressure	12,640	12,640	*psi*	
Minimum Pipe Body Yield Strength	641,000		*lb*	
API Joint Strength		641,000	*lb*	
Compression Rating		641,000	*lb*	
Reference Length		21,370	*ft*	[5]
Maximum Uniaxial Bend Rating		91.7	*deg/100 ft*	[3]
MAKE-UP DATA				
Minimum Make-Up Torque		17,000	*ft-lb*	[4]
Maximum Make-Up Torque		20,000	*ft-lb*	[4]
Maximum Operating Torque		39,500	*ft-lb*	[4]
Make-Up Loss		5.58	in.	

UNCONTROLLED

Notes:
1) Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2) Joint Efficiencies are calculated by dividing the connection critical area by the pipe body area.
3) Uniaxial bend rating shown is structural only.
4) Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
5) Reference length is calculated by joint strength divided by Nominal Linear Weight, T&C with 1.5 safety factor.
6) Coupling must meet minimum mechanical properties of the pipe.

U. S. Steel Tubular Products 1-877-893-9461
460 Wildwood Forest Dr., Suite 300S connections@uss.com
Spring, TX 77380 www.usstubular.com

Flat Creek

Submitted by:
Cesar Acosta
cacosta@compasswellservices.com
432-561-5970
3/12/2021

Prepared for:
Mr. Robert Brosig
Consulting Engineer

compass Cementing

FLAT CREEK - EDDY COUNTY GENERIC WELL - SURFACE

Flat Creek - Eddy County Generic Well - Surface

WELL BORE DETAILS

Hole Size

Size	Depth (ft)	
14 3/4	1000	TMD
	1000	TVD

Previous Casing

Size	Depth (ft)	Grade	Weight
20	120		

Casing

Size	Depth (ft)	Grade	Weight	Thread
10 3/4	1000		45.5	

Formation

Mud Weight/Type	BH Temp	
8.4 ppg FW	87 °F	BHST
	81 °F	BHCT

compass Cementing

Flat Creek - Eddy County Generic Well - Surface

JOB AND FLUID DETAILS

Job Details

Pump 40 bbls of fresh water Spacer

Mix and pump 450 sks of Lead slurry mixed @ 13.5 ppg, yielding 787.5 ft^3 (140.2 bbls)

Mix and pump 250 sks of Tail slurry mixed @ 14.8 ppg, yielding 335 ft^3 (59.6 bbls)

Displace Top Wiper plug with approximately 92.3 bbls of water (actual volume determined on location)

Slurry Properties	Yield	Density	Mix Water
Lead Cement	1.74	13.5	8.83
Tail Cement	1.34	14.8	6.35

350

Lead Cement Slurry - 450 sks (93% Excess) TOC Surface	
100 Class C Premium	
Premium Gel (Bentonite)	2.00 %
C-51 Suspension Agent	0.05 %
Kol Seal	5.00 #/sk
C-503P Defoamer	0.30 %
Calcium Chloride	0.50 %

Tail Cement Slurry - 250 sks (85% Excess) TOC 700	
100 Class C Premium	
C-45 Econolite	0.10 %
Calcium Chloride	1.00 %

compass Cementing

Flat Creek - Eddy County Generic Well - Surface

COST ESTIMATE

Description	Quantity		Units	Gross Amount		Net Amount
Pump Charge 0' to 1000'	1	$2,650.00	each	$2,650.00		$636.00
Pump Charge - Additional Hours	-	$1,700.00	hour	$0.00		$0.00
HV Mileage	100	$11.40	mile	$1,140.00		$274.00
LV Mileage	100	$6.74	mile	$674.00		$162.00
Field Storage Bin delivery	100	$11.40	mile	$1,140.00		$274.00
Field Storage Bin - 3 Days	1	$1,700.00	each	$1,700.00		$408.00
Cementing Head Rental	1	$2,500.00	each	$2,500.00		$600.00
Top Rubber Plug: 13 3/8"	1	$1,070.00	each	$1,070.00		$256.80
Data Acquisition	1	$1,130.00	each	$1,130.00		$271.20
Thickening Time Test, Field Blend	1	$2,180.00	each	$2,180.00		$523.20
Centrifugal Pump	-	$1,130.00	each	$0.00		$0.00
Circulating Equipment	-	$6,000.00	each	$0.00		$0.00
Derrick Charge	-	$1,000.00	each	$0.00		$0.00
Subtotal for Pumping & Equipment Charges				$14,184.00		$3,405.20
Class C Premium	700	$35.92	sacks	$25,144.00		$6,034.00
Premium Gel (Bentonite)	846	$0.98	lb	$829.08		$203.04
Kol Seal	2,250	$0.97	lb	$2,182.50		$517.50
C-503P Defoamer	127	$5.93	lb	$753.11		$180.34
C-45 Econolite	24	$3.34	lb	$80.16		$19.20
C-51 Suspension Agent	22	$38.04	lb	$836.88		$200.86
Calcium Chloride	447	$2.11	lb	$943.17		$227.97
C-503L Defoamer	-	$120.42	gal	$0.00		$0.00
Sugar	-	$4.20	lb	$0.00		$0.00
Materials Handling	765	$3.75	CF	$2,868.75		$688.50
Drayage	35,000	$0.09	sacks x miles	$3,150.00		$756.00
Subtotal for Materials Charges				$36,787.65		$8,827.41
Gross Price Subtotal						$50,971.65
Discount					76.0%	($38,739.04)
Pre-tax Total						**$12,232.61**

compass Cementing

Flat Creek

Submitted by:
Jonathan Croitz
432-561-5970
4/8/2021

Prepared for:
Mr. Robert Brosig
Consulting Engineer

compass Cementing

FLAT CREEK - EDDY COUNTY GENERIC WELL - INTERMEDIATE - VERSION 2

REVISED FOR INCREASED EXCESS

WELL BORE DETAILS

Hole Size

Size	Depth (ft)	
9 7/8	1000 - 10500	TMD
	10500	TVD

Previous Casing

Size	Depth (ft)	Grade	Weight
10 3/4	1000		40.5

Casing

Size	Depth (ft)	Grade	Weight	Thread
7 5/8	0 - 10500	HCP-110	29.7	

Formation

Mud Weight/Type	BH Temp	
9 ppg Brine	157 °F	BHST
	123 °F	BHCT

JOB AND FLUID DETAILS

Job Details

Pump 20 bbls of fresh water

Pump 20 bbls of gel spacer

Mix and pump 560 sks of Primary slurry mixed @ 13.5 ppg, yielding 851.2 ft^3 (151.6 bbls)

Displace Top Wiper plug with approximately 477.8 bbls of water (actual fluid type and volume determined on location)

Check floats. Wait on cement +/- 2 hrs before starting bradenhead squeeze.

Tie into bradenhead valve.

Pump 20 bbls of gel spacer

Pump 840 gal of Sodium Silicate 102

Pump 20 bbls of fresh water spacer

Mix and pump 1600 sks of Bradendhead Cement mixed @ 14.8 ppg, yielding 2128 ft^3 (379 bbls) (calculated cement volume equals the annular volume from 7,550' back to surface, plus 25%

Displace with 2 bbls of water.

Shut-in backside and wash truck to the pit.

Slurry Properties	Yield	Density	Mix Water
Primary Cement	1.52	13.5	7.78
Bradenhead Cement	1.33	14.8	6.33

Primary Cement Slurry - 560 sks (30% Excess) TOC 7550

100 HSLD 100 Cement	
C-51 Suspension Agent	0.10 %
C-45 Econolite	0.10 %
STE	4.00 %
Citric Acid	0.15 %
CFL-1	0.20 %

Bradenhead Cement Slurry - 1600 sks (25% Excess) TOC Surface

100 Class C Premium

compass Cementing

COST ESTIMATE

Description	Quantity		Units	Gross Amount		Net Amount
Pump Charge 10001' to 11000'	1	$8,315.00	each	$8,315.00		$2,078.75
Pump Charge - Additional Hours	-	$1,700.00	hour	$0.00		$0.00
Reserve Pump Truck	1	$9,640.00	each	$9,640.00		$2,410.00
Reserve Pump Truck after 10 hrs	-	$1,700.00	hour	$0.00		$0.00
HV Mileage	200	$11.40	mile	$2,280.00		$570.00
LV Mileage	200	$6.74	mile	$1,348.00		$338.00
Field Storage Bin delivery	200	$11.40	mile	$2,280.00		$570.00
Field Storage Bin - 3 Days	2	$1,700.00	each	$3,400.00		$850.00
Cementing Head Rental	1	$2,500.00	each	$2,500.00		$625.00
Top Rubber Plug: 9 5/8"	-	$410.00	each	$0.00		$0.00
Data Acquisition	1	$1,130.00	each	$1,130.00		$282.50
Thickening Time Test, Field Blend	1	$2,180.00	each	$2,180.00		$545.00
Centrifugal Pump		$1,130.00	each	$0.00		$0.00
Circulating Equipment		$6,000.00	each	$0.00		$0.00
Derrick Charge		$1,000.00	each	$0.00		$0.00
Citric Acid	4	$14.06	lb	$56.24		$14.08
C-51 Suspension Agent	80	$38.04	lb	$3,043.20		$760.80
Soda Ash - PH Buffer	100	$1.50	lb	$150.00		$38.00
Subtotal for Pumping & Equipment Charges				$36,322.44		$9,082.13
Class C Premium	1,600	$40.00	sacks	$64,000.00		$16,000.00
HSLD 100 Cement	560	$46.68	sacks	$26,140.80		$6,535.20
Citric Acid	71	$14.06	lb	$998.26		$249.92
CFL-1	95	$63.70	lb	$6,051.50		$1,513.35
C-45 Econolite	48	$3.52	lb	$168.96		$42.24
C-51 Suspension Agent	48	$38.04	lb	$1,825.92		$456.48
STE	1,893	$1.29	lb	$2,441.97		$605.76
Sodium Silicate 102	840	$10.42	gal	$8,752.80		$2,192.40
C-503L Defoamer	-	$120.42	gal	$0.00		$0.00
Sugar	-	$4.20	lb	$0.00		$0.00
Materials Handling	2,196	$3.75	CF	$8,235.00		$2,058.75
Drayage	216,000	$0.09	sacks x miles	$19,440.00		$4,860.00
Subtotal for Materials Charges				$138,055.21		$34,514.10
Gross Price Subtotal						$174,377.65
Discount					75.0%	($130,781.42)
Pre-tax Total						**$43,596.23**

compass Cementing

Flat Creek

Submitted by:
Cesar Acosta
cacosta@compasswellservices.com
432-561-5970
3/11/2021

Prepared for:
Mr. Robert Brosig
Drilling Manager

compass Cementing

EDDY COUNTY GENERIC WELL - PRODUCTION

Eddy County Generic Well - Production

WELL BORE DETAILS

Hole Size

Size	Depth (ft)	
6 3/4	16,500	TMD
	11,100	TVD
	10600	KOP

Previous Casing

Size	Depth (ft)	Grade	Weight
9 7/8	10500	HCP-110	20

Casing

Size	Depth (ft)	Grade	Weight	Thread
5 1/2	0-10,400	HCP-110	20	USF
5	10,400-16,500	HCP-110	18	DWC

Tubing

Size	Depth (ft)	Grade	Weight

Formation

Mud Weight/Type	BH Temp	
12.5 ppg OBM	161°F	BHST
	158°F	BHCT

compass Cementing

Eddy County Generic Well - Production

JOB AND FLUID DETAILS

Job Details

Mix and pump weighed spacer w/ surfactants at 13.5 ppg (based on final mud denisty)

Mix and pump 665 sks of Primary slurry mixed @ 14.2 ppg, yielding 837.0 ft^3 (149.2 bbls) 5-8 bpm

Displace Top Wiper plug with approximately 292.3 bbls of water (actual volume determined on location) 5-8 bpm

Land plug, pressure 500 psi over landing pressure, check floats. (final pressure determined on location)

Slurry Properties	Yield	Density	Mix Water
Primary Cement	1.26	14.2	5.95

Primary Cement Slurry - 665 sks (10% Excess) TOC 10000	
50:50 Class H Premium:Compass Poz-Mix	
Citric Acid	0.05 %
CSA-1000 - Fluid Loss Additive	0.05 %
C-49 Expanding Gas Flow Con	0.20 %

compass Cementing

Eddy County Generic Well - Production

COST ESTIMATE

Description	Quantity		Units	Gross Amount		Net Amount
Pump Charge 16001' to 17000'	1	$25,955.00	each	$25,955.00		$5,710.10
Pump Charge - Additional Hours	-	$1,700.00	hour	$0.00		$0.00
Reserve Pump Truck	1	$9,640.00	each	$9,640.00		$2,120.80
Reserve Pump Truck after 10 hrs	-	$1,700.00	hour	$0.00		$0.00
Batch Mixer - First 10 hours	1	$4,920.00	each	$4,920.00		$1,082.40
Batch Mixer - Additional hours	-	$720.00	hour	$0.00		$0.00
HV Mileage	300	$11.40	mile	$3,420.00		$753.00
LV Mileage	100	$6.74	mile	$674.00		$148.00
Field Storage Bin delivery	100	$11.40	mile	$1,140.00		$251.00
Field Storage Bin - 3 Days	1	$1,700.00	each	$1,700.00		$374.00
Cementing Head Rental	1	$2,500.00	each	$2,500.00		$550.00
Data Acquisition	1	$1,130.00	each	$1,130.00		$248.60
Thickening Time Test, Field Blend	1	$2,180.00	each	$2,180.00		$479.60
Centrifugal Pump	-	$1,130.00	each	$0.00		$0.00
Circulating Equipment	-	$6,000.00	each	$0.00		$0.00
Derrick Charge	-	$1,000.00	each	$0.00		$0.00
Barite	131	$70.56	sack	$9,243.36		$2,033.12
CSG-1	40	$98.79	lb	$3,951.60		$869.20
Plexaid - 803	50	$58.56	gal	$2,928.00		$644.00
Plexaid - 840 Surfactant	25	$169.54	gal	$4,238.50		$932.50
Subtotal for Pumping & Equipment Charges				$73,620.46		$16,196.32
Class H Premium	333	$35.92	sacks	$11,961.36		$2,630.70
Compass Poz-Mix	333	$20.30	sacks	$6,759.90		$1,488.51
Citric Acid	28	$13.94	lb	$390.32		$85.96
CSA-1000 - Fluid Loss Additive	28	$60.48	Lb	$1,693.44		$372.68
C-49 Expanding Gas Flow Control	112	$45.35	lb	$5,079.20		$1,117.76
C-503L Defoamer	-	$120.42	gal	$0.00		$0.00
Sugar	-	$4.20	lb	$0.00		$0.00
Materials Handling	669	$3.75	CF	$2,508.75		$551.93
Drayage	46,400	$0.09	sacks x miles	$4,176.00		$918.72
Subtotal for Materials Charges				$32,568.97		$7,166.26
Gross Price Subtotal						$106,189.43
Discount					78.0%	($82,826.86)
Pre-tax Total						**$23,362.58**

compass Cementing

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

AS-DRILLED
WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-46755	97814	PURPLE SAGE: WOLFCAMP (Gas)

[4] Property Code	[5] Property Name	[6] Well Number
333919	PHANTOM BANK 31 FED	502H

[7] OGRID No.	[8] Operator Name	[9] Elevation
374037	FLAT CREEK RESOURCES, LLC	3130'

[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
D	32	26 SOUTH	31 EAST, N.M.P.M.		600'	NORTH	400'	WEST	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
L1	31	26 SOUTH	31 EAST, N.M.P.M.		852'	NORTH	127'	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
264.48			

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]

FINAL BOTTOM TAKE POINT		
X=	657,705'	NAD 27
Y=	365,405'	
LAT.	32.003592° N	
LONG.	103.824583° W	
X=	698,891'	NAD83/86
Y=	365,462'	
LAT.	32.003717° N	
LONG.	103.825058° W	

FINAL TOP TAKE POINT		
X=	662,378'	NAD 27
Y=	365,474'	
LAT.	32.003721° N	
LONG.	103.809507° W	
X=	703,565'	NAD83/86
Y=	365,531'	
LAT.	32.003846° N	
LONG.	103.809981° W	

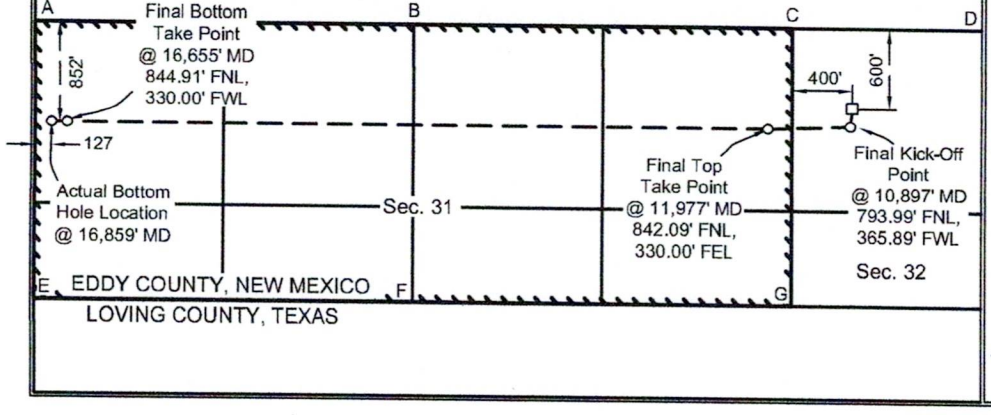
FINAL KICK-OFF POINT		
X=	663,073'	NAD 27
Y=	365,529'	
LAT.	32.003861° N	
LONG.	103.807262° W	
X=	704,260'	NAD83/86
Y=	365,586'	
LAT.	32.003987° N	
LONG.	103.807736° W	

ACTUAL BOTTOM HOLE LOCATION		
X=	657,501'	NAD 27
Y=	365,395'	
LAT.	32.003566° N	
LONG.	103.825239° W	
X=	698,688'	NAD83/86
Y=	365,452'	
LAT.	32.003691° N	
LONG.	103.825714° W	

CORNER COORDINATES TABLE (NAD 27)

A - Y=366245.06, X=657370.11
B - Y=366283.60, X=660040.51
C - Y=366321.04, X=662703.16
D - Y=366332.89, X=665368.25
E - Y=364109.66, X=657381.51
F - Y=364123.23, X=660052.17
G - Y=364137.17, X=662715.32

PHANTOM BANK 31 FED COM NO. 502H WELL		
X=	663,106'	NAD 27
Y=	365,723'	
LAT.	32.004395° N	
LONG.	103.807152° W	
X=	704,293'	NAD83/86
Y=	365,780'	
LAT.	32.004520° N	
LONG.	103.807626° W	
ELEV.	+3130'	NAVD88



[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.

Rodney Littleton 8/18/2023
Signature Date

Rodney Littleton
Printed Name

rodney.littleton@flatcreekresources.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.

04/22/2021
Date of Survey

Signature and Seal of Professional Surveyor:

STEVEN M. COLEMAN NEW MEXICO 22921 PROFESSIONAL SURVEYOR

Steven M. Coleman
Certificate Number 08/15/2023

Casing Design Worksheet

Casing	10-3/4" 45.5#, J-55,STC	7-5/8" 29.7#, HCL-80, Butt
Collapse, psi	2090	7150
Internal Yield Pressure, psi	3580	6890
Body Yield, lbs.	715000	683000
Joint Strength, lbs.	796000	785000
Collapse Load	**Surface**	**Intermediate 1**
Depth, feet	1150	10500
Mud Weight, ppg	9	10
Pressure, psi	538.2	5460
Design Safety Factor	3.9	1.3
Burst Load		
Depth, feet	1150	10500
Mud Weight, ppg	9	10
Pressure, psi	538.2	5460
Design Safety Factor	6.7	1.3
Body Tensile		
Depth, feet	1150	10500
Pipe Weight, ppf	45.5	29.7
String Weight, lbs.	52325	311850
Design Safety Factor	13.7	2.2
Joint Tensile		
Depth, feet	1150	10500
Pipe Weight, ppf	45.5	29.7
String Weight, lbs.	52325	311850
Design Safety Factor	15.2	2.5

None	5-1/2" 20#, RYS-110, Talon HTQ	
		11100
		12640
		641000
		641000
Intermediate 2	**Production Top**	
		10400
		11
		5948.8
		1.9
		10400
		11
		5948.8
		2.1
		10400
		20
		208000
		3.1
		10400
		20
		208000
		3.1

5" 18#, P-110, DQX

13470
13940
580000
580000

Production Bottom

11000
11
6292

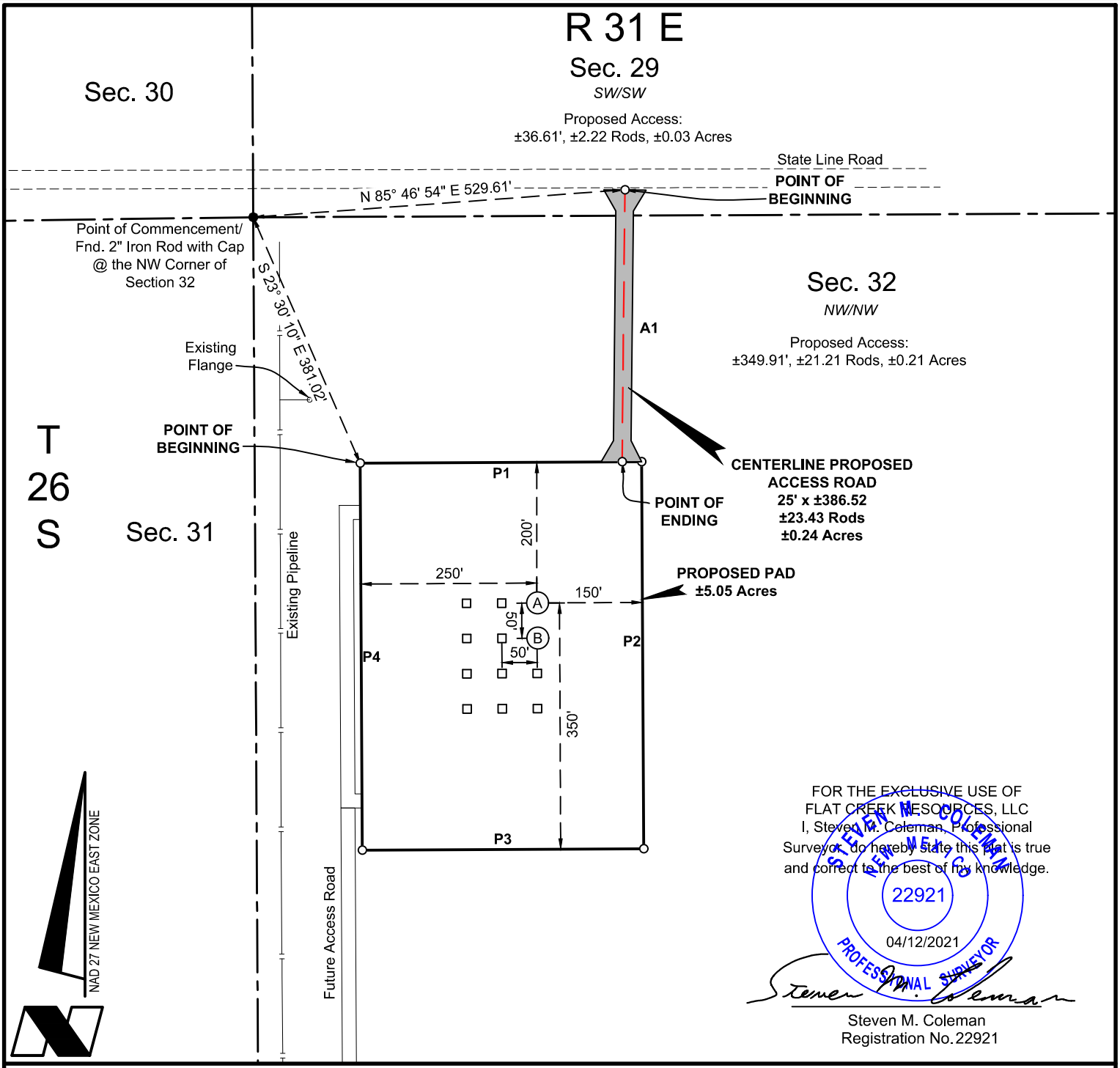
2.1

11000
11
6292

2.2

Horizontal

Horizontal



FOR THE EXCLUSIVE USE OF
FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
NEW MEXICO
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No. 22921

SURFACE USE PLAT

Scale: 1" = 200'

200' 0 100' 200'

Page 1 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NORTH PAD
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: KJD	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	DMB	04/06/2021	Revise access and wells
DATE: 09/05/2019				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 SUP_New.dwg				

NW PAD CORNER			NE PAD CORNER		
X=	662,855	NAD 27	X=	663,255	NAD 27
Y=	365,972		Y=	365,974	
LAT.	32.005082 N		LAT.	32.005082 N	
LONG.	103.807960 W		LONG.	103.806669 W	
X=	704,042	NAD83/86	X=	704,442	NAD83/86
Y=	366,029		Y=	366,031	
LAT.	32.005207 N		LAT.	32.005207 N	
LONG.	103.808434 W		LONG.	103.807143 W	
ELEV.	+3,129'	NAVD88	ELEV.	+3,135'	NAVD88
SW PAD CORNER			SE PAD CORNER		
X=	662,858	NAD 27	X=	663,258	NAD 27
Y=	365,422		Y=	365,424	
LAT.	32.003570 N		LAT.	32.003570 N	
LONG.	103.807958 W		LONG.	103.806668 W	
X=	704,045	NAD83/86	X=	704,445	NAD83/86
Y=	365,479		Y=	365,481	
LAT.	32.003695 N		LAT.	32.003695 N	
LONG.	103.808432 W		LONG.	103.807142 W	
ELEV.	+3,120'	NAVD88	ELEV.	+3,125'	NAVD88

PROPOSED PAD		
COURSE	BEARING	DISTANCE
P1	N 89° 42' 47" E	400.00'
P2	S 00° 19' 09" E	550.00'
P3	S 89° 42' 47" W	400.00'
P4	N 00° 19' 09" W	550.00'

(A) PHANTOM BANK 31 FED COM NO. 506H WELL		
X=	663,106'	NAD 27
Y=	365,773'	
LAT.	32.004532° N	
LONG.	103.807153° W	
X=	704,293'	NAD83/86
Y=	365,830'	
LAT.	32.004657° N	
LONG.	103.807627° W	
ELEV.	+3,135'	NAVD88
CALLS	550' FNL / 400' FWL	

(B) PHANTOM BANK 31 FED COM NO. 502 WELL		
X=	663,106'	NAD 27
Y=	365,723'	
LAT.	32.004395° N	
LONG.	103.807152° W	
X=	704,293'	NAD83/86
Y=	365,780'	
LAT.	32.004520° N	
LONG.	103.807626° W	
ELEV.	+3,130'	NAVD88
CALLS	600' FNL / 400' FWL	

POINT OF BEGINNING ACCESS ROAD			POINT OF ENDING ACCESS ROAD		
X=	663,231'	NAD 27	X=	663,227'	NAD 27
Y=	366,360'		Y=	365,973'	
LAT.	32.006144° N		LAT.	32.005082° N	
LONG.	103.806740° W		LONG.	103.806759° W	
X=	704,418'	NAD83/86	X=	704,414'	NAD83/86
Y=	366,417'		Y=	366,031'	
LAT.	32.006270° N		LAT.	32.005207° N	
LONG.	103.807214° W		LONG.	103.807233° W	

PROPOSED ACCESS ROAD		
COURSE	BEARING	DISTANCE
A1	S 00° 35' 32" W	386.52'

FOR THE EXCLUSIVE USE OF
FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No. 22921

DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

NOTE:
Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

NOTE:
Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nm811.org.

SURFACE USE PLAT

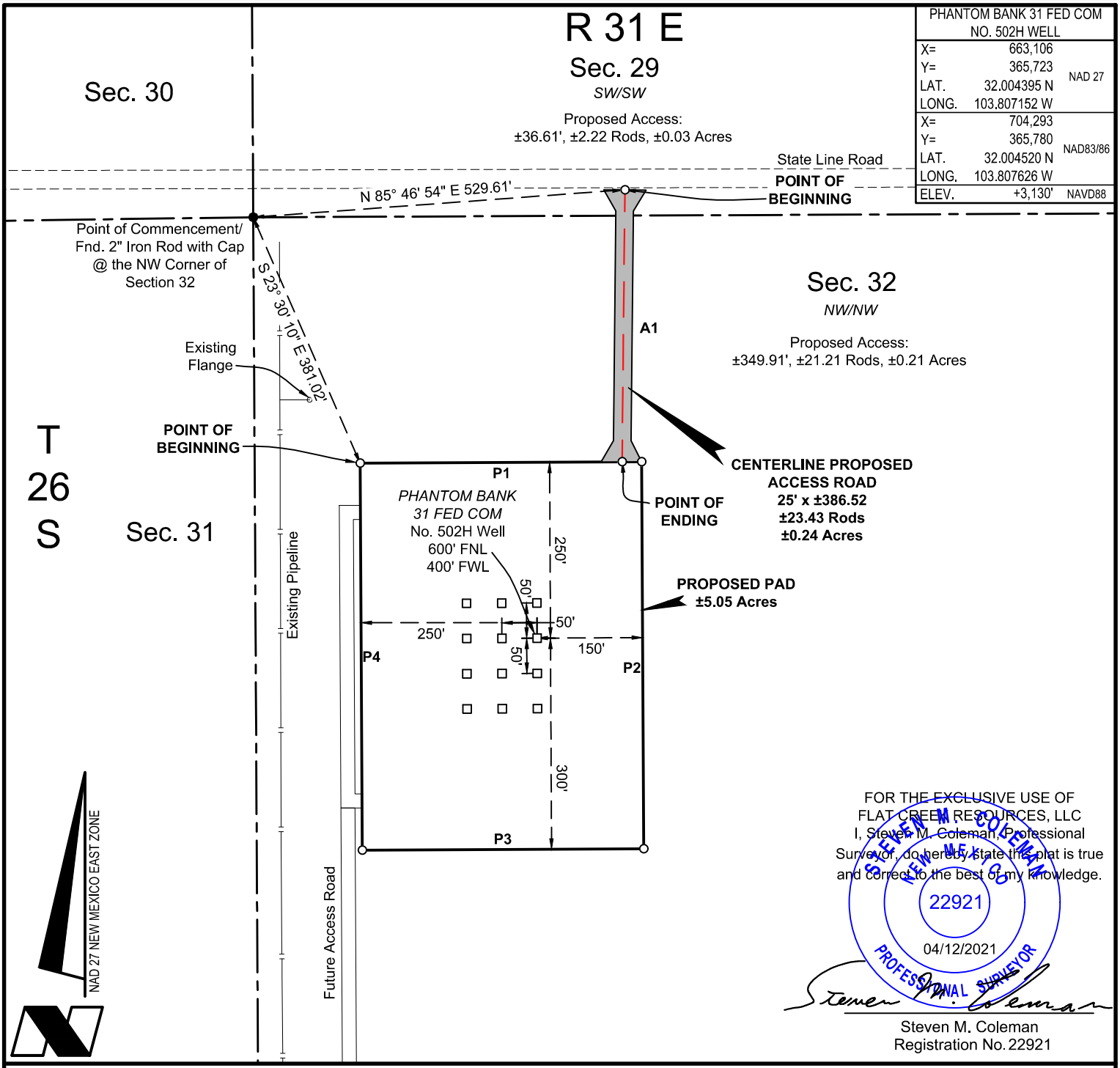
Page 2 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NORTH PAD
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: KJD	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	DMB	04/06/2021	Revise access and wells
DATE: 09/05/2019				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 SUP_New.dwg				



PHANTOM BANK 31 FED COM NO. 502H WELL		
X=	663,106	NAD 27
Y=	365,723	
LAT.	32.004395 N	
LONG.	103.807152 W	
X=	704,293	NAD83/86
Y=	365,780	
LAT.	32.004520 N	
LONG.	103.807626 W	
ELEV.	+3,130'	NAVD88

FOR THE EXCLUSIVE USE OF
FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
NEW MEXICO
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No. 22921

WELL PLAT

Scale: 1" = 200'
200' 0 100' 200'

Page 1 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NO. 502H WELL
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 04/12/2021				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 No.502H_ Well Plat.dwg				

NW PAD CORNER			NE PAD CORNER		
X=	662,855	NAD 27	X=	663,255	NAD 27
Y=	365,972		Y=	365,974	
LAT.	32.005082 N		LAT.	32.005082 N	
LONG.	103.807960 W		LONG.	103.806669 W	
X=	704,042	NAD83/86	X=	704,442	NAD83/86
Y=	366,029		Y=	366,031	
LAT.	32.005207 N		LAT.	32.005207 N	
LONG.	103.808434 W		LONG.	103.807143 W	
ELEV.	+3,129'	NAVD88	ELEV.	+3,135'	NAVD88
SW PAD CORNER			SE PAD CORNER		
X=	662,858	NAD 27	X=	663,258	NAD 27
Y=	365,422		Y=	365,424	
LAT.	32.003570 N		LAT.	32.003570 N	
LONG.	103.807958 W		LONG.	103.806668 W	
X=	704,045	NAD83/86	X=	704,445	NAD83/86
Y=	365,479		Y=	365,481	
LAT.	32.003695 N		LAT.	32.003695 N	
LONG.	103.808432 W		LONG.	103.807142 W	
ELEV.	+3,120'	NAVD88	ELEV.	+3,125'	NAVD88

POINT OF BEGINNING ACCESS ROAD			POINT OF ENDING ACCESS ROAD		
X=	663,231'	NAD 27	X=	663,227'	NAD 27
Y=	366,360'		Y=	365,973'	
LAT.	32.006144° N		LAT.	32.005082° N	
LONG.	103.806740° W		LONG.	103.806759° W	
X=	704,418'	NAD83/86	X=	704,414'	NAD83/86
Y=	366,417'		Y=	366,031'	
LAT.	32.006270° N		LAT.	32.005207° N	
LONG.	103.807214° W		LONG.	103.807233° W	

PROPOSED ACCESS ROAD		
COURSE	BEARING	DISTANCE
A1	S 00° 35' 32" W	386.52'

PROPOSED PAD		
COURSE	BEARING	DISTANCE
P1	N 89° 42' 47" E	400.00'
P2	S 00° 19' 09" E	550.00'
P3	S 89° 42' 47" W	400.00'
P4	N 00° 19' 09" W	550.00'

DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

NOTE:
Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

NOTE:
Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nm811.org.

FOR THE EXCLUSIVE USE OF
FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
NEW MEXICO
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No. 22921

WELL PLAT

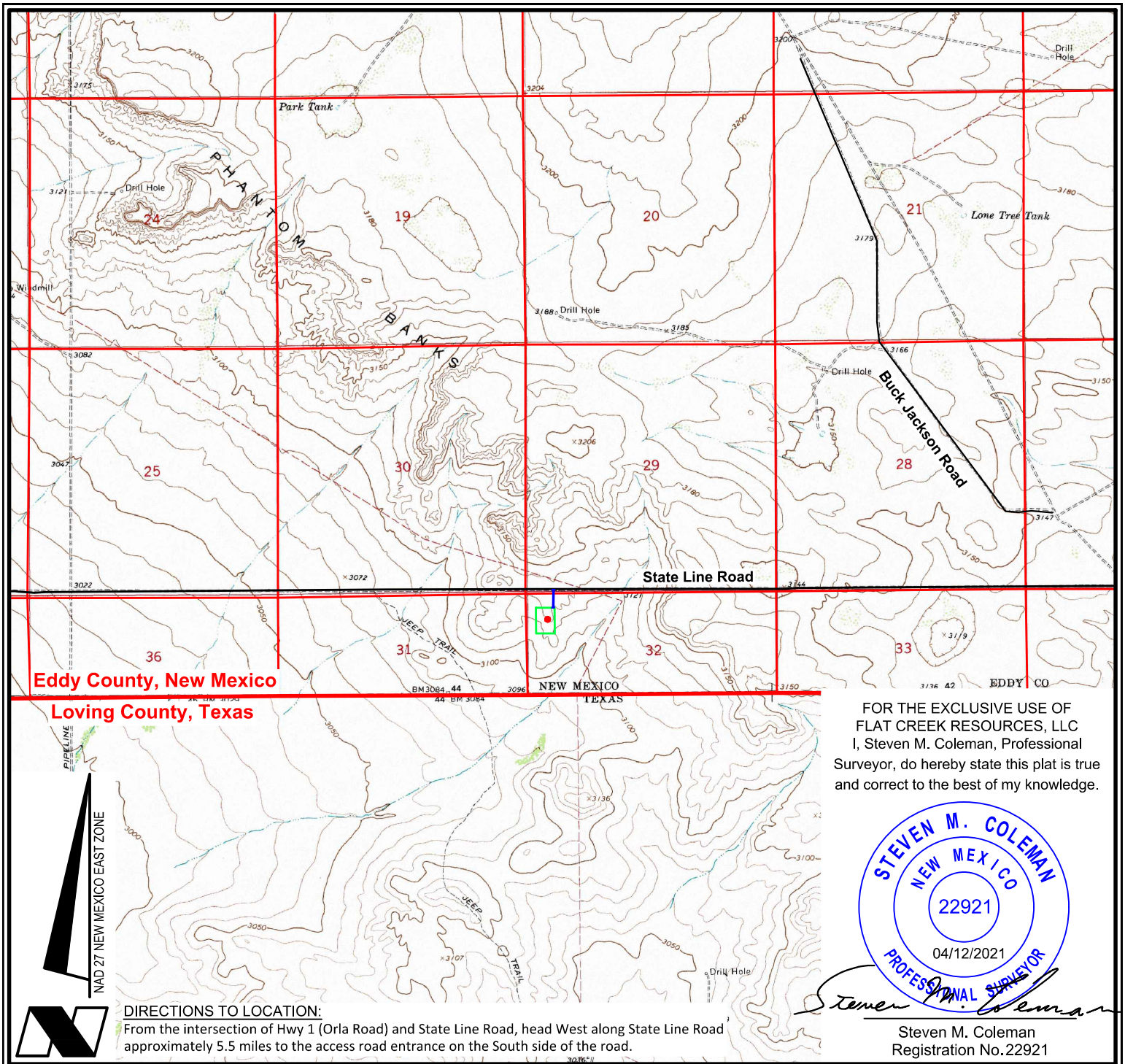
Page 2 of 2

FLAT CREEK RESOURCES, LLC

PROPOSED PAD & ACCESS ROADS
PHANTOM BANK 31 FED COM NO. 502H WELL
SECTIONS 29 & 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 04/12/2021				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 No.502H_ Well Plat.dwg				



DIRECTIONS TO LOCATION:
From the intersection of Hwy 1 (Orla Road) and State Line Road, head West along State Line Road approximately 5.5 miles to the access road entrance on the South side of the road.

FOR THE EXCLUSIVE USE OF FLAT CREEK RESOURCES, LLC
I, Steven M. Coleman, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

STEVEN M. COLEMAN
NEW MEXICO
22921
04/12/2021
PROFESSIONAL SURVEYOR

Steven M. Coleman
Registration No.22921

ROAD PLAT

Scale: 1" = 3000'
3000' 0 1500' 3000'

LEGEND
- Proposed Well
- Proposed Access Road
- Proposed Drillsite
- Existing Road
- Section Line
- Township & Range

FLAT CREEK RESOURCES, LLC
PHANTOM BANK 31 FED COM NO. 502H WELL
LOCATED 600' FNL AND 400' FWL
SECTION 32, T26S-R31E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 04/12/2021				
FILENAME: T:\2019\2199965\DWG\Phantom Bank 31 Fed Com Pad 1 No.502H_ Road Plat.dwg				

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	[2] Pool Code	[3] Pool Name
	97814	PURPLE SAGE: WOLFCAMP

[4] Property Code	[5] Property Name	[6] Well Number
	PHANTOM BANK 31 FED COM	502H

[7] OGRID No.	[8] Operator Name	[9] Elevation
	FLAT CREEK RESOURCES, LLC	3130'

[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
D	32	26 SOUTH	31 EAST, N.M.P.M.		600'	NORTH	400'	WEST	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
L1	31	26 SOUTH	31 EAST, N.M.P.M.		822'	NORTH	100'	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
264.48			

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]

PROPOSED LAST TAKE POINT		
X=	657,704'	NAD 27
Y=	365,428'	
LAT.	32.003654° N	
LONG.	103.824583° W	
X=	698,891'	NAD83/86
Y=	365,485'	
LAT.	32.003780° N	
LONG.	103.825058° W	

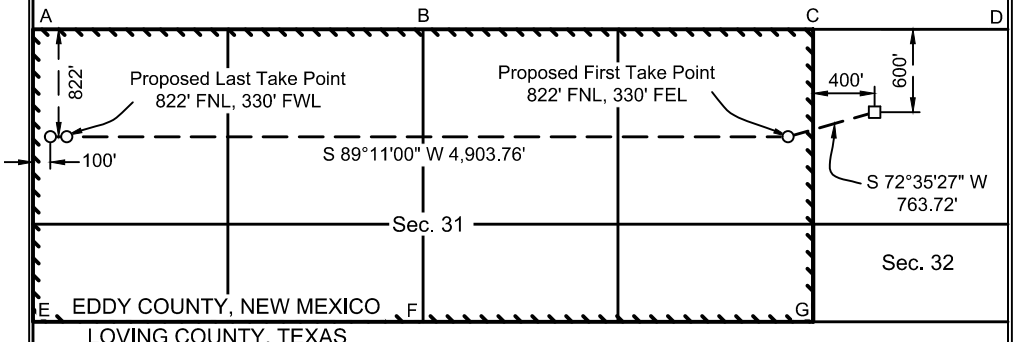
PROPOSED BOTTOM HOLE LOCATION		
X=	657,474'	NAD 27
Y=	365,424'	
LAT.	32.003648° N	
LONG.	103.825325° W	
X=	698,661'	NAD83/86
Y=	365,482'	
LAT.	32.003774° N	
LONG.	103.825800° W	

CORNER COORDINATES TABLE (NAD 27)

A - Y=366245.06, X=657370.11
B - Y=366283.60, X=660040.51
C - Y=366321.04, X=662703.16
D - Y=366332.89, X=665368.25
E - Y=364109.66, X=657381.51
F - Y=364123.23, X=660052.17
G - Y=364137.17, X=662715.32

PROPOSED FIRST TAKE POINT		
X=	662,378'	NAD 27
Y=	365,494'	
LAT.	32.003776° N	
LONG.	103.809507° W	
X=	703,565'	NAD83/86
Y=	365,551'	
LAT.	32.003902° N	
LONG.	103.809981° W	

PHANTOM BANK 31 FED COM NO. 502H WELL		
X=	663,106'	NAD 27
Y=	365,723'	
LAT.	32.004395° N	
LONG.	103.807152° W	
X=	704,293'	NAD83/86
Y=	365,780'	
LAT.	32.004520° N	
LONG.	103.807626° W	
ELEV.	+3130'	NAVD88



[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.

Rodney Littleton 04/13/2021
Signature Date

Rodney Littleton
Printed Name

rodney.littleton@flatcreekresources.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.

02/26/2019
Date of Survey

Signature and Seal of Professional Surveyor:

STEVEN M. COLEMAN
NEW MEXICO
22921
PROFESSIONAL SURVEYOR
04/12/2021

Certificate Number

Tenaris

ULTRA™ DQX

Coupling	Pipe Body
Grade: **P110**	Grade: **P110**
Body: **White**	1st Band: **White**
1st Band: **-**	2nd Band: **-**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.000 in.	**Wall Thickness**	0.362 in.	**Grade**	P110
Min. Wall Thickness	87.50 %	**Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.000 in.	**Wall Thickness**	0.362 in.	**Body Yield Strength**	580 x1000 lb
Nominal Weight	18 lb/ft	**Plain End Weight**	17.95 lb/ft	**Min. Internal Yield Pressure**	13,940 psi
Drift	4.151 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Set Drift	4.151 in.			**Collapse Pressure**	13,470 psi
Nominal ID	4.276 in.				

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.800 in.	**Tension Efficiency**	100 %	**Minimum**	9800 ft-lb
Coupling Length	8.194 in.	**Joint Yield Strength**	580 x1000 lb	**Optimum**	10,900 ft-lb
Connection ID	4.276 in.	**Internal Pressure Capacity**	13,940 psi	**Maximum**	12,000 ft-lb
Make-up Loss	4.097 in.	**Compression Efficiency**	100 %		
Threads per inch	5	**Compression Strength**	580 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	101 °/100 ft	**Operating Torque**	14,900 ft-lb
				Yield Torque	17,500 ft-lb

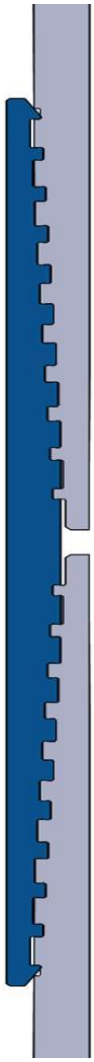
Notes

For the lastest performance data, always visit our website: www.tenaris.com

Generated: 3/11/2021

U. S. Steel Tubular Products

5.500 20.00 (0.361) USS RYS110 USS-TALON HTQ™ RD5.900



	Pipe	Connection		
MECHANICAL PROPERTIES				
Minimum Yield Strength	**110,000**		*psi*	[6]
Maximum Yield Strength	**125,000**		*psi*	[6]
Minimum Tensile Strength	**120,000**		*psi*	[6]
DIMENSIONS				
Outside Diameter	**5.500**	**5.900**	*in.*	
Wall Thickness	0.361		*in.*	
Inside Diameter	4.778	4.778	*in.*	
Drift - API	4.653		*in.*	
Nominal Linear Weight, T&C	**20.00**		*lb/ft*	
Plain End Weight	19.83	19.83	*lb/ft*	
SECTION AREA				
Cross Sectional Area | Critical Area	5.828	5.828	*sq. in.*	
Joint Efficiency		100.0	%	[2]
PERFORMANCE				
Minimum Collapse Pressure	11,100	11,100	*psi*	
Minimum Internal Yield Pressure	12,640	12,640	*psi*	
Minimum Pipe Body Yield Strength	641,000		*lb*	
API Joint Strength		641,000	*lb*	
Compression Rating		641,000	*lb*	
Reference Length		21,370	*ft*	[5]
Maximum Uniaxial Bend Rating		91.7	*deg/100 ft*	[3]
MAKE-UP DATA				
Minimum Make-Up Torque		17,000	*ft-lb*	[4]
Maximum Make-Up Torque		20,000	*ft-lb*	[4]
Maximum Operating Torque		39,500	*ft-lb*	[4]
Make-Up Loss		5.58	in.	

Notes:
1) Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2) Joint Efficiencies are calculated by dividing the connection critical area by the pipe body area.
3) Uniaxial bend rating shown is structural only.
4) Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
5) Reference length is calculated by joint strength divided by Nominal Linear Weight, T&C with 1.5 safety factor.
6) Coupling must meet minimum mechanical properties of the pipe.

UNCONTROLLED

U. S. Steel Tubular Products 1-877-893-9461
460 Wildwood Forest Dr., Suite 300S connections@uss.com
Spring, TX 77380 www.usstubular.com

Flat Creek

Submitted by:
Cesar Acosta
cacosta@compasswellservices.com
432-561-5970
3/12/2021

Prepared for:
Mr. Robert Brosig
Consulting Engineer

compass Cementing

FLAT CREEK - EDDY COUNTY GENERIC WELL - SURFACE

Flat Creek - Eddy County Generic Well - Surface

WELL BORE DETAILS

Hole Size

Size	Depth (ft)	
14 3/4	1000	TMD
	1000	TVD

Previous Casing

Size	Depth (ft)	Grade	Weight
20	120		

Casing

Size	Depth (ft)	Grade	Weight	Thread
10 3/4	1000		45.5	

Formation

Mud Weight/Type	BH Temp	
8.4 ppg FW	87 °F	BHST
	81 °F	BHCT

compass Cementing

Flat Creek - Eddy County Generic Well - Surface

JOB AND FLUID DETAILS

Job Details

Pump 40 bbls of fresh water Spacer

Mix and pump 450 sks of Lead slurry mixed @ 13.5 ppg, yielding 787.5 ft^3 (140.2 bbls)

Mix and pump 250 sks of Tail slurry mixed @ 14.8 ppg, yielding 335 ft^3 (59.6 bbls)

Displace Top Wiper plug with approximately 92.3 bbls of water (actual volume determined on location)

Slurry Properties	Yield	Density	Mix Water
Lead Cement	1.74	13.5	8.83
Tail Cement	1.34	14.8	6.35

350

Lead Cement Slurry - 450 sks (93% Excess) TOC Surface	
100 Class C Premium	
Premium Gel (Bentonite)	2.00 %
C-51 Suspension Agent	0.05 %
Kol Seal	5.00 #/sk
C-503P Defoamer	0.30 %
Calcium Chloride	0.50 %

Tail Cement Slurry - 250 sks (85% Excess) TOC 700	
100 Class C Premium	
C-45 Econolite	0.10 %
Calcium Chloride	1.00 %

compass Cementing

Flat Creek - Eddy County Generic Well - Surface

COST ESTIMATE

Description	Quantity		Units	Gross Amount		Net Amount
Pump Charge 0' to 1000'	1	$2,650.00	each	$2,650.00		$636.00
Pump Charge - Additional Hours	-	$1,700.00	hour	$0.00		$0.00
HV Mileage	100	$11.40	mile	$1,140.00		$274.00
LV Mileage	100	$6.74	mile	$674.00		$162.00
Field Storage Bin delivery	100	$11.40	mile	$1,140.00		$274.00
Field Storage Bin - 3 Days	1	$1,700.00	each	$1,700.00		$408.00
Cementing Head Rental	1	$2,500.00	each	$2,500.00		$600.00
Top Rubber Plug: 13 3/8"	1	$1,070.00	each	$1,070.00		$256.80
Data Acquisition	1	$1,130.00	each	$1,130.00		$271.20
Thickening Time Test, Field Blend	1	$2,180.00	each	$2,180.00		$523.20
Centrifugal Pump	-	$1,130.00	each	$0.00		$0.00
Circulating Equipment	-	$6,000.00	each	$0.00		$0.00
Derrick Charge	-	$1,000.00	each	$0.00		$0.00
Subtotal for Pumping & Equipment Charges				$14,184.00		$3,405.20
Class C Premium	700	$35.92	sacks	$25,144.00		$6,034.00
Premium Gel (Bentonite)	846	$0.98	lb	$829.08		$203.04
Kol Seal	2,250	$0.97	lb	$2,182.50		$517.50
C-503P Defoamer	127	$5.93	lb	$753.11		$180.34
C-45 Econolite	24	$3.34	lb	$80.16		$19.20
C-51 Suspension Agent	22	$38.04	lb	$836.88		$200.86
Calcium Chloride	447	$2.11	lb	$943.17		$227.97
C-503L Defoamer	-	$120.42	gal	$0.00		$0.00
Sugar	-	$4.20	lb	$0.00		$0.00
Materials Handling	765	$3.75	CF	$2,868.75		$688.50
Drayage	35,000	$0.09	sacks x miles	$3,150.00		$756.00
Subtotal for Materials Charges				$36,787.65		$8,827.41
Gross Price Subtotal						$50,971.65
Discount					76.0%	($38,739.04)
Pre-tax Total						**$12,232.61**

compass Cementing

Flat Creek

Submitted by:
Jonathan Croitz
432-561-5970
4/8/2021

Prepared for:
Mr. Robert Brosig
Consulting Engineer

compass Cementing

FLAT CREEK - EDDY COUNTY GENERIC WELL - INTERMEDIATE - VERSION 2

REVISED FOR INCREASED EXCESS

WELL BORE DETAILS

Hole Size

Size	Depth (ft)	
9 7/8	1000 - 10500	TMD
	10500	TVD

Previous Casing

Size	Depth (ft)	Grade	Weight
10 3/4	1000		40.5

Casing

Size	Depth (ft)	Grade	Weight	Thread
7 5/8	0 - 10500	HCP-110	29.7	

Formation

Mud Weight/Type	BH Temp	
9 ppg Brine	157 °F	BHST
	123 °F	BHCT

JOB AND FLUID DETAILS

Job Details

Pump 20 bbls of fresh water

Pump 20 bbls of gel spacer

Mix and pump 560 sks of Primary slurry mixed @ 13.5 ppg, yielding 851.2 ft^3 (151.6 bbls)

Displace Top Wiper plug with approximately 477.8 bbls of water (actual fluid type and volume determined on location)

Check floats. Wait on cement +/- 2 hrs before starting bradenhead squeeze.

Tie into bradenhead valve.

Pump 20 bbls of gel spacer

Pump 840 gal of Sodium Silicate 102

Pump 20 bbls of fresh water spacer

Mix and pump 1600 sks of Bradendhead Cement mixed @ 14.8 ppg, yielding 2128 ft^3 (379 bbls) (calculated cement volume equals the annular volume from 7,550' back to surface, plus 25%

Displace with 2 bbls of water.

Shut-in backside and wash truck to the pit.

Slurry Properties	Yield	Density	Mix Water
Primary Cement	1.52	13.5	7.78
Bradenhead Cement	1.33	14.8	6.33

Primary Cement Slurry - 560 sks (30% Excess) TOC 7550	
100 HSLD 100 Cement	
C-51 Suspension Agent	0.10 %
C-45 Econolite	0.10 %
STE	4.00 %
Citric Acid	0.15 %
CFL-1	0.20 %

Bradenhead Cement Slurry - 1600 sks (25% Excess) TOC Surface

100 Class C Premium

COST ESTIMATE

Description	Quantity		Units	Gross Amount		Net Amount
Pump Charge 10001' to 11000'	1	$8,315.00	each	$8,315.00		$2,078.75
Pump Charge - Additional Hours	-	$1,700.00	hour	$0.00		$0.00
Reserve Pump Truck	1	$9,640.00	each	$9,640.00		$2,410.00
Reserve Pump Truck after 10 hrs	-	$1,700.00	hour	$0.00		$0.00
HV Mileage	200	$11.40	mile	$2,280.00		$570.00
LV Mileage	200	$6.74	mile	$1,348.00		$338.00
Field Storage Bin delivery	200	$11.40	mile	$2,280.00		$570.00
Field Storage Bin - 3 Days	2	$1,700.00	each	$3,400.00		$850.00
Cementing Head Rental	1	$2,500.00	each	$2,500.00		$625.00
Top Rubber Plug: 9 5/8"	-	$410.00	each	$0.00		$0.00
Data Acquisition	1	$1,130.00	each	$1,130.00		$282.50
Thickening Time Test, Field Blend	1	$2,180.00	each	$2,180.00		$545.00
Centrifugal Pump		$1,130.00	each	$0.00		$0.00
Circulating Equipment		$6,000.00	each	$0.00		$0.00
Derrick Charge		$1,000.00	each	$0.00		$0.00
Citric Acid	4	$14.06	lb	$56.24		$14.08
C-51 Suspension Agent	80	$38.04	lb	$3,043.20		$760.80
Soda Ash - PH Buffer	100	$1.50	lb	$150.00		$38.00
Subtotal for Pumping & Equipment Charges				$36,322.44		$9,082.13
Class C Premium	1,600	$40.00	sacks	$64,000.00		$16,000.00
HSLD 100 Cement	560	$46.68	sacks	$26,140.80		$6,535.20
Citric Acid	71	$14.06	lb	$998.26		$249.92
CFL-1	95	$63.70	lb	$6,051.50		$1,513.35
C-45 Econolite	48	$3.52	lb	$168.96		$42.24
C-51 Suspension Agent	48	$38.04	lb	$1,825.92		$456.48
STE	1,893	$1.29	lb	$2,441.97		$605.76
Sodium Silicate 102	840	$10.42	gal	$8,752.80		$2,192.40
C-503L Defoamer	-	$120.42	gal	$0.00		$0.00
Sugar	-	$4.20	lb	$0.00		$0.00
Materials Handling	2,196	$3.75	CF	$8,235.00		$2,058.75
Drayage	216,000	$0.09	sacks x miles	$19,440.00		$4,860.00
Subtotal for Materials Charges				$138,055.21		$34,514.10
Gross Price Subtotal						$174,377.65
Discount					75.0%	($130,781.42)
Pre-tax Total						**$43,596.23**

compass Cementing

Flat Creek

Submitted by:
Cesar Acosta
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432-561-5970
3/11/2021

Prepared for:
Mr. Robert Brosig
Drilling Manager

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EDDY COUNTY GENERIC WELL - PRODUCTION

Eddy County Generic Well - Production

WELL BORE DETAILS

Hole Size

Size	Depth (ft)	
6 3/4	16,500	TMD
	11,100	TVD
	10600	KOP

Previous Casing

Size	Depth (ft)	Grade	Weight
9 7/8	10500	HCP-110	20

Casing

Size	Depth (ft)	Grade	Weight	Thread
5 1/2	0-10,400	HCP-110	20	USF
5	10,400-16,500	HCP-110	18	DWC

Tubing

Size	Depth (ft)	Grade	Weight

Formation

Mud Weight/Type	BH Temp	
12.5 ppg OBM	161°F	BHST
	158°F	BHCT

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Eddy County Generic Well - Production

JOB AND FLUID DETAILS

Job Details

Mix and pump weighed spacer w/ surfactants at 13.5 ppg (based on final mud denisty)

Mix and pump 665 sks of Primary slurry mixed @ 14.2 ppg, yielding 837.0 ft^3 (149.2 bbls) 5-8 bpm

Displace Top Wiper plug with approximately 292.3 bbls of water (actual volume determined on location) 5-8 bpm

Land plug, pressure 500 psi over landing pressure, check floats. (final pressure determined on location)

Slurry Properties	Yield	Density	Mix Water
Primary Cement	1.26	14.2	5.95

Primary Cement Slurry - 665 sks (10% Excess) TOC 10000	
50:50 Class H Premium:Compass Poz-Mix	
Citric Acid	0.05 %
CSA-1000 - Fluid Loss Additive	0.05 %
C-49 Expanding Gas Flow Con	0.20 %

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Eddy County Generic Well - Production

COST ESTIMATE

Description	Quantity		Units	Gross Amount		Net Amount
Pump Charge 16001' to 17000'	1	$25,955.00	each	$25,955.00		$5,710.10
Pump Charge - Additional Hours	-	$1,700.00	hour	$0.00		$0.00
Reserve Pump Truck	1	$9,640.00	each	$9,640.00		$2,120.80
Reserve Pump Truck after 10 hrs	-	$1,700.00	hour	$0.00		$0.00
Batch Mixer - First 10 hours	1	$4,920.00	each	$4,920.00		$1,082.40
Batch Mixer - Additional hours	-	$720.00	hour	$0.00		$0.00
HV Mileage	300	$11.40	mile	$3,420.00		$753.00
LV Mileage	100	$6.74	mile	$674.00		$148.00
Field Storage Bin delivery	100	$11.40	mile	$1,140.00		$251.00
Field Storage Bin - 3 Days	1	$1,700.00	each	$1,700.00		$374.00
Cementing Head Rental	1	$2,500.00	each	$2,500.00		$550.00
Data Acquisition	1	$1,130.00	each	$1,130.00		$248.60
Thickening Time Test, Field Blend	1	$2,180.00	each	$2,180.00		$479.60
Centrifugal Pump	-	$1,130.00	each	$0.00		$0.00
Circulating Equipment	-	$6,000.00	each	$0.00		$0.00
Derrick Charge	-	$1,000.00	each	$0.00		$0.00
Barite	131	$70.56	sack	$9,243.36		$2,033.12
CSG-1	40	$98.79	lb	$3,951.60		$869.20
Plexaid - 803	50	$58.56	gal	$2,928.00		$644.00
Plexaid - 840 Surfactant	25	$169.54	gal	$4,238.50		$932.50
Subtotal for Pumping & Equipment Charges				$73,620.46		$16,196.32
Class H Premium	333	$35.92	sacks	$11,961.36		$2,630.70
Compass Poz-Mix	333	$20.30	sacks	$6,759.90		$1,488.51
Citric Acid	28	$13.94	lb	$390.32		$85.96
CSA-1000 - Fluid Loss Additive	28	$60.48	Lb	$1,693.44		$372.68
C-49 Expanding Gas Flow Control	112	$45.35	lb	$5,079.20		$1,117.76
C-503L Defoamer	-	$120.42	gal	$0.00		$0.00
Sugar	-	$4.20	lb	$0.00		$0.00
Materials Handling	669	$3.75	CF	$2,508.75		$551.93
Drayage	46,400	$0.09	sacks x miles	$4,176.00		$918.72
Subtotal for Materials Charges				$32,568.97		$7,166.26
Gross Price Subtotal						$106,189.43
Discount					78.0%	($82,826.86)
Pre-tax Total						**$23,362.58**

compass Cementing

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1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
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Phone:(575) 748-1283 Fax:(575) 748-9720
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 308522

CONDITIONS

Operator: Flat Creek Resources, LLC 777 Main St. Fort Worth, TX 76102	OGRID: 374034
	Action Number: 308522
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	None	2/5/2024