Form 3160-3
(June 2015)

HOBBS OCD
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FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM092199

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

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

8. Lease Name and Well No. (322426 COM)
COPPERLINE WEST 29 FEDERAL
7H

2. Name of Operator
CAZA OPERATING LLC (249099)

9. API Well No.
30-025-45183

3a. Address
200 N. Loraine Street, Suite 1550 Midland TX 79701

3b. Phone No. *(include area code)*
(432)682-7424

10. Field and Pool, or Exploratory
BELL LAKE / AVALON BS (5140)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NENW / 130 FNL / 2180 FWL / LAT 32.282496 / LONG -103.493568
At proposed prod. zone SESW / 330 FSL / 2275 FWL / LAT 32.269251 / LONG -103.493239

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 29 / T23S / R34E / NMP

14. Distance in miles and direction from nearest town or post office*
18.5 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
130 feet

16. No of acres in lease
560

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
50 feet

19. Proposed Depth
9062 feet / 13637 feet

20. BLM/BIA Bond No. in file
FED: NMB000471

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3539 feet

22. Approximate date work will start*
03/22/2018

23. Estimated duration
30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Tony B Sam / Ph: (432)682-7424	12/22/2017

Title
VP Operations

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	08/31/2018

Title	Office
Assistant Field Manager Lands & Minerals	CARLSBAD

Application approval 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.
Conditions of approval, if any, are attached.

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.

Requested OCP 09/13/18
OCP Rec 09/13/18

APPROVED WITH CONDITIONS
Approval Date: 08/31/2018

KZ 09/13/18

(Continued on page 2)

*(Instructions on page 2)

Double Lined

SL

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

Additional Operator Remarks

Location of Well

1. SHL: NENW / 130 FNL / 2180 FWL / TWSP: 23S / RANGE: 34E / SECTION: 29 / LAT: 32.282496 / LONG: -103.493568 (TVD: 0 feet, MD: 0 feet)
   PPP: NENW / 269 FNL / 2250 FWL / TWSP: 23S / RANGE: 34E / SECTION: 29 / LAT: 32.282111 / LONG: -103.493364 (TVD: 8860 feet, MD: 8900 feet)
   BHL: SESW / 330 FSL / 2275 FWL / TWSP: 23S / RANGE: 34E / SECTION: 29 / LAT: 32.269251 / LONG: -103.493239 (TVD: 9062 feet, MD: 13637 feet)

BLM Point of Contact

Name: Priscilla Perez
Title: Legal Instruments Examiner
Phone: 5752345934
Email: pperez@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

AFMSS

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

Application Data Report

08/31/2018

APD ID: 10400007991 **Submission Date:** 12/22/2017

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400007991 **Tie to previous NOS?** **Submission Date:** 12/22/2017

BLM Office: CARLSBAD **User:** Tony B Sam **Title:** VP Operations

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM092199 **Lease Acres:** 560

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? YES **APD Operator:** CAZA OPERATING LLC

Operator letter of designation:

Operator Info

Operator Organization Name: CAZA OPERATING LLC

Operator Address: 200 N. Loraine Street, Suite 1550

Zip: 79701

Operator PO Box:

Operator City: Midland **State:** TX

Operator Phone: (432)682-7424

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Mater Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** BELL LAKE **Pool Name:** AVALON

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** YES **New surface disturbance?** Y

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** WEST COPPERLINE 29 FEDERAL **Number:** 3H

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: APPRAISAL

Describe sub-type:

Distance to town: 18.5 Miles **Distance to nearest well:** 50 FT **Distance to lease line:** 130 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Copperline_West_29_Federal_7H_C102_signed_20180505075530.pdf

Well work start Date: 03/22/2018 **Duration:** 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 16.11.0555

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	130	FNL	2180	FWL	23S	34E	29	Aliquot NENW	32.282496	-103.493568	LEA	NEW MEXICO	NEW MEXICO	S	STATE	3539	0	0
KOP Leg #1	130	FNL	2180	FWL	23S	34E	29	Aliquot NENW	32.282496	-103.493568	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-4924	8463	8463
PPP Leg #1	269	FNL	2250	FWL	23S	34E	29	Aliquot NENW	32.282111	-103.493364	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-5321	8900	8860

APD ID: 10400007991 **Submission Date:** 12/22/2017

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	RUSTLER	-2550	1013	1013		NONE	No
2	TOP SALT	-3763	1213	1213	SALT	NONE	No
3	BASE OF SALT	-7363	4813	4813		NONE	No
4	DELAWARE	-7656	5106	5106		OIL	No
5	CHERRY CANYON	-8353	5803	5803		NONE	No
6	BRUSHY CANYON	-9713	7163	7163		NONE	No
7	BONE SPRING	-11203	8653	8662		OIL	No
8	AVALON SAND	-11373	8823	8863		NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 15000

Equipment: Rotating head with a rating of 500psi will be used. A remote kill line and gas buster will be used

Requesting Variance? YES

Variance request: Variance is requested for the use of a coflex hose for the choke line to from the BOP to the choke manifold. A variance is requested to use 1502(15,000psi working pressure) hammer unions downstream of the Choke Manifold used to connect the mud/gas separator and panic line. See choke manifold diagram.
Testing Procedure: Minimum Working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13-3/8 inch casing shoe shall be 5000 (5M) psi. 5M 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. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests. 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 pug. BOP/BOPE testing can begin after cut-off or once cement reaches 500PSI 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). 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 (18 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). a. The results of the test shall be reported to the appropriate BLM office. b. 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. c. 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

Choke Diagram Attachment:

Copperline_West_29_Federal_7H_Choke_Schematic_08-23-2017.docx

Copperline_West_29_Fed_7H_Coflex_Hose_Cert_20180505073325.pdf

BOP Diagram Attachment:

Copperline_West_29_Federal_7H_BOP_Schematic_08-23-2017.docx

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCTOR	26	20.0	NEW	API	N	0	120	0	120	-3539	-3419	120	H-40	94	STC						
2	SURFACE	17.5	13.375	NEW	API	N	0	1063	0	1063	-3539	-2550	1063	J-55	54.5	STC	2.3	1.3	DRY	8.87	DRY	14.73
3	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3900	0	3900	-3539	361	3900	J-55	40	LTC	1.27	1.72	DRY	2.57	DRY	3.11
4	INTERMEDIATE	12.25	9.625	NEW	API	N	3900	5056	3900	5056	361	1517	1156	HCL-80	40	LTC	1.61	1.34	DRY	18.1	DRY	19.82
5	PRODUCTION	8.75	5.5	NEW	API	N	0	13637	0	9062	-3539	5523	13637	P-110	17	BUTT	1.78	2.48	DRY	3.69	DRY	3.54

Casing Attachments

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Casing Attachments

Casing ID: 1 **String Type:** CONDUCTOR

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 2 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Copperline_West_29_Federal_7H_Casing_and_Cement_Design_08-23-2017.pdf

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Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Copperline_West_29_Federal_7H_Casing_and_Cement_Design_08-23-2017.pdf

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Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Casing Attachments

Casing ID: 4 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Copperline_West_29_Federal_7H_Casing_and_Cement_Design_08-23-2017.pdf

Casing ID: 5 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Copperline_West_29_Federal_7H_Casing_and_Cement_Design_08-23-2017.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead		0	0	0	0	0	0	0	NA	NA
CONDUCTOR	Lead		0	120	75	1.93	13.5	1110	50	Class C	+ 4% bwoc Bentonite II + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005% bwoc Static Free + 0.005 gps FP- 6L

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	763	315	1.93	13.5	608	50	Class C	4% bwoc Bentonite II + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005% bwoc Static Free + 0.005 gps FP- 6L
SURFACE	Tail		763	1063	166	1.34	14.8	215	50	Class C	1.5% bwoc Calcium Chloride + 0.005 lbs/sack Static Free + 0.005 gps FP-6L
INTERMEDIATE	Lead		0	4565	1210	2.13	12.6	293	50	Class C	(35:65) + Poz (Fly Ash) + 4% bwoc Bentonite II + 5% bwoc MPA-5 + 0.25% bwoc FL-52 + 5 lbs/sack LCM- 1 + 0.125 lbs/sack Cello Flake + 0.005 lbs/sack Static Free + 0.005 gps FP-6L + 1.2% bwoc Sodium Metasilicate + 5% bwow Sodium Chloride
INTERMEDIATE	Tail		4565	5065	220	1.33	14.8	293	50	Class C	none
PRODUCTION	Lead		0	8850	1550	2.38	11.8	3689	50	Class H	(50:50) + Poz (Fly Ash) + 10% bwoc Bentonite II + 5% bwow Sodium Chloride + 5 lbs/sack LCM-1 + 0.005 lbs/sack Static Free + 0.005 gps FP-6L
PRODUCTION	Tail		8850	13367	900	1.62	13.2	1458	50	Class H	(15:61:11) Poz (Fly Ash):Class H Cement:CSE-2 + 4% bwow Sodium Chloride + 3 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.005 gps FP-6L + 0.005% bwoc Static

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud will be on location to control any abnormal conditions encountered. Such as but not limited to a kick, lost circulation and hole sloughing

Describe the mud monitoring system utilized: A Pason PVT system will be rigged up prior to spudding the well. A volume monitoring system that measures, calculates, and displays readings from the mud system on the rig to alert the rig crew of impending gas kicks and lost circulation issues. Components a) PVT Pit Bull monitor: Acts as the heart of the system, containing all the controls, switches, and alarms. Typically, it is mounted near the driller's console. b) Junction box: Provides a safe, convenient place for making the wiring connections. c) Mud probes: Measure the volume of drilling fluid in each individual tank. d) Flow sensor: Measures the relative amount of mud flowing in the return line.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1063	SPUD MUD	8.4	8.9	66	0.12	9.5	10	0	0	
1063	5065	SALT SATURATED	9.8	10	75	0.1	9.5	2	150000	0	
5065	13637	WATER-BASED MUD	8.6	9.1	71	0.4	9.5	6	125000	18	Cut Brine

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

no production tests

List of open and cased hole logs run in the well:

DS,MWD,MUDLOG

Coring operation description for the well:

no coring

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3000 **Anticipated Surface Pressure:** 1050.8

Anticipated Bottom Hole Temperature(F): 149

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? NO

Hydrogen sulfide drilling operations plan:

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

160803_Copperline_West_29_Fed_7H_Directional_Plan_08-23-2017.pdf

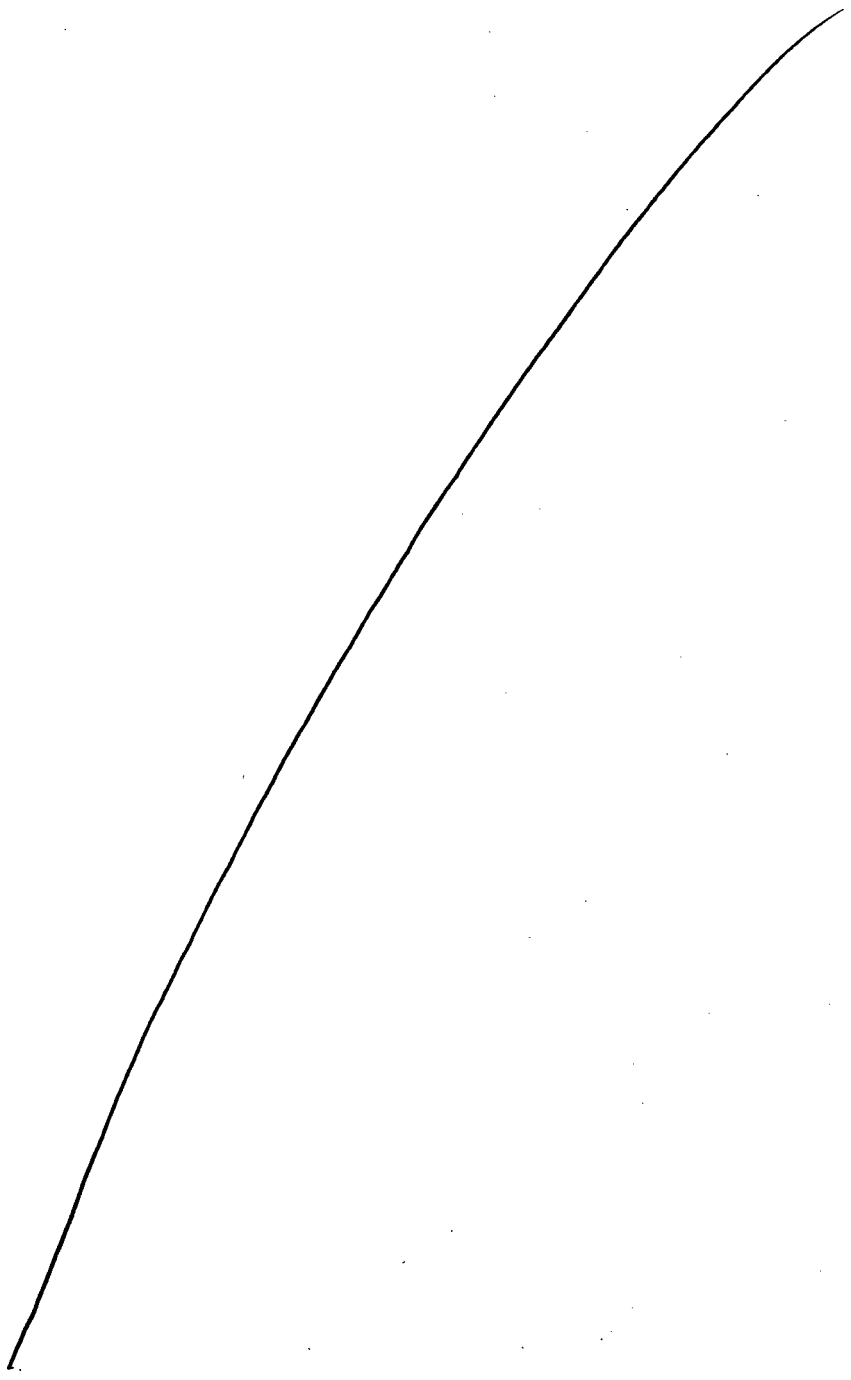
Other proposed operations facets description:

Gas Capture Plan
H2S Plan

Other proposed operations facets attachment:

160803_Copperline_West_29_Fed_7H_Directional_Plot_08-23-2017.pdf
Copperline_West_29_Fed_7H_Gas_Capture_Plan_20180505073524.pdf
Copperline_West_29_Fed_7H_H2S_plan_20180505073555.pdf

Other Variance attachment:



COPPER STATE RUBBER
VISUAL INSPECTION / HYDROSTATIC TEST REPORT
CHOKE & KILL HOSE
10,000 P.S.I. W/P X 15,000 P.S.I. T/P
SPEC: 090-1915 HS
H2S SUITABLE

SHOP ORDER NO.: 16454 SIZE: 4" I.D.

SERIAL NO.: 22199 LENGTH 50 FT. IN.

CONNECTIONS: 4-1/16" 10,000 PSI API FLANGES

HT-X1840

VISUAL INSPECTION

(A) END CAPS / SLEEVE RECESS: OK
(B) EXTERIOR / COVER / BRANDING: OK
(C) INTERIOR TUBE: OK

HYDROSTATIC TEST

5 MIN. @ 10,000 PSI

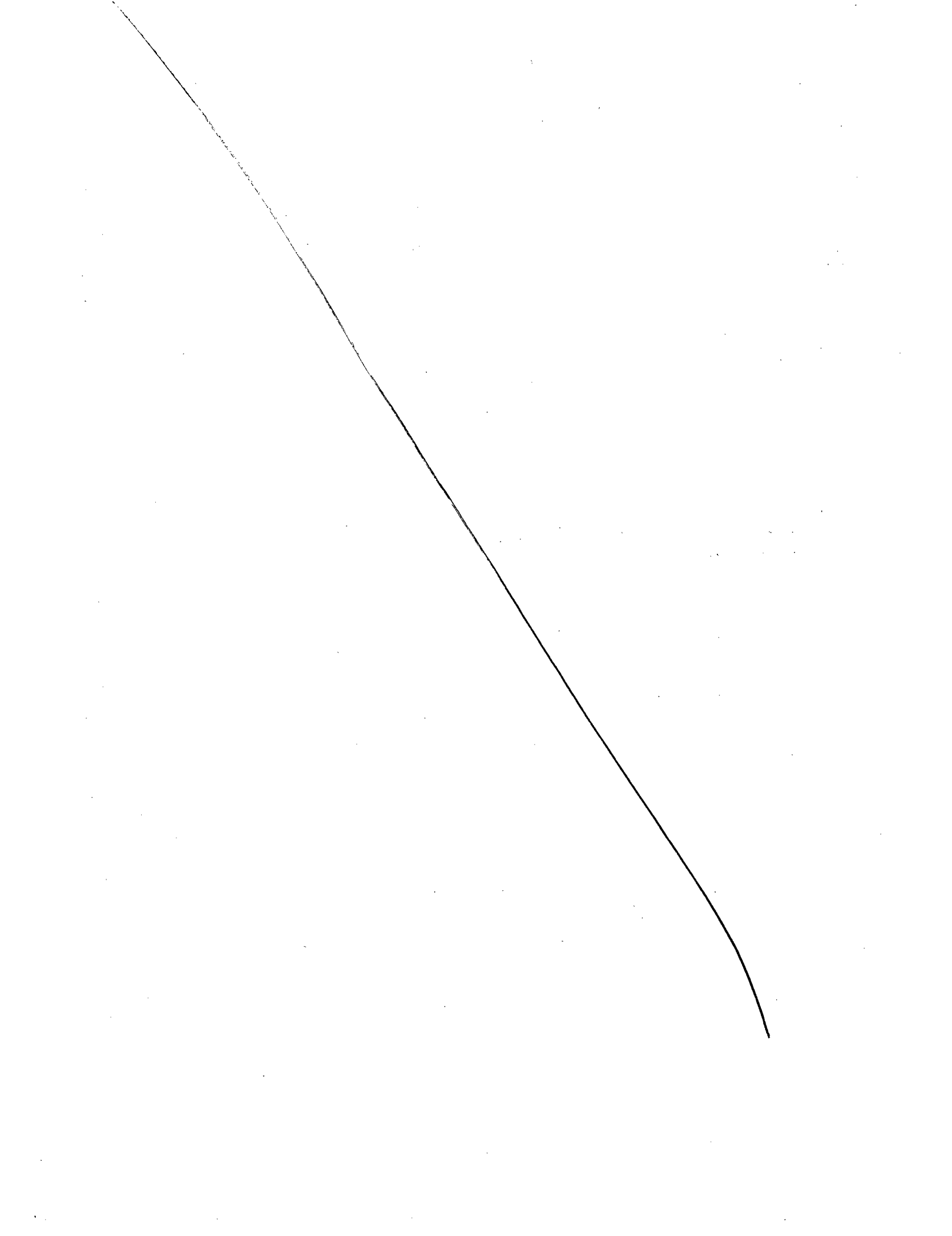
2 MIN. @ 0 PSI 51' OAL

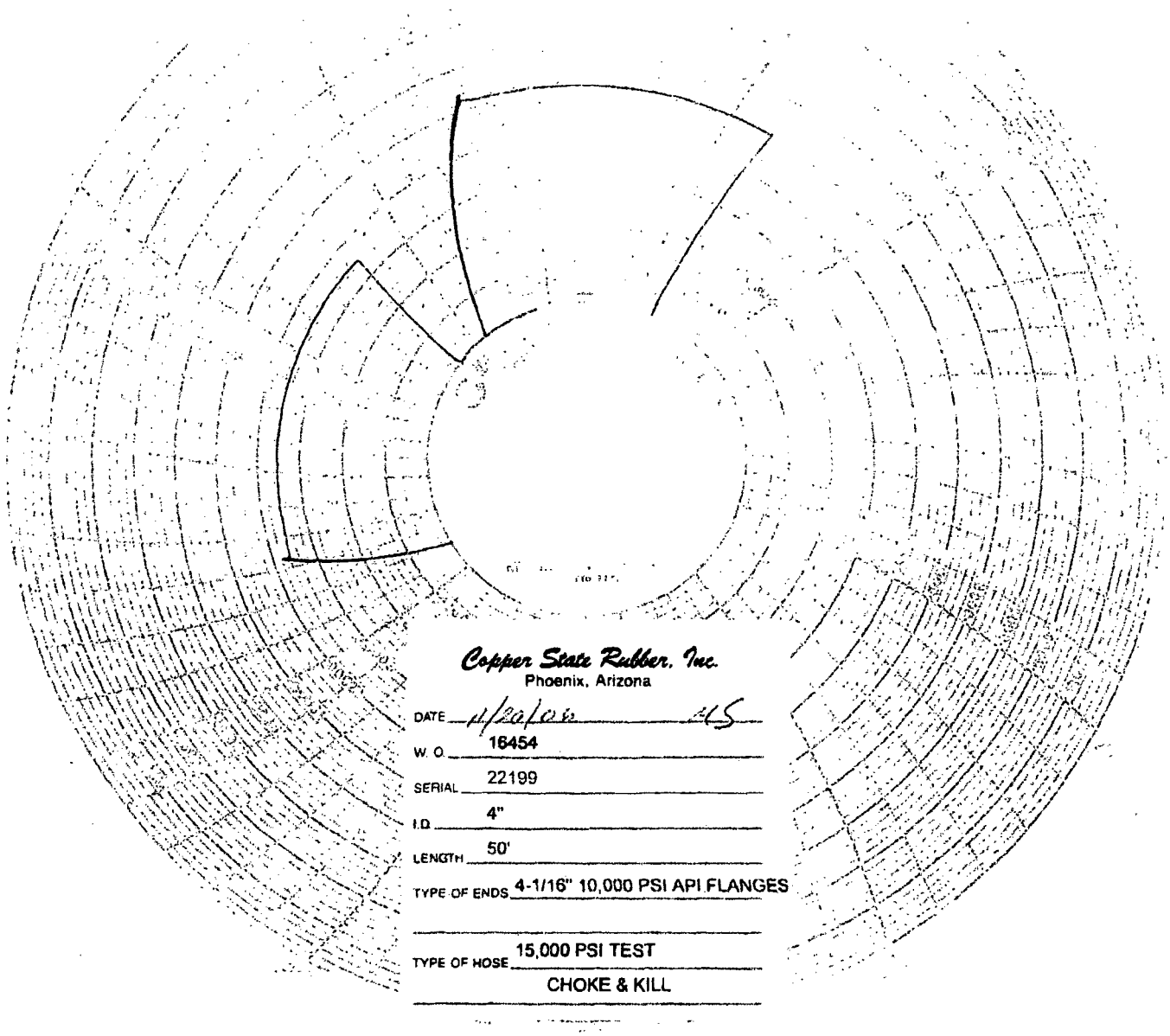
3 MIN. @ 15,000 PSI

WITNESSED BY:

DATE November 20, 2006

FORM QA-21- REV-2
3-22-00





Copper State Rubber, Inc.
Phoenix, Arizona

DATE 4/20/01 AS

W. O. 16454

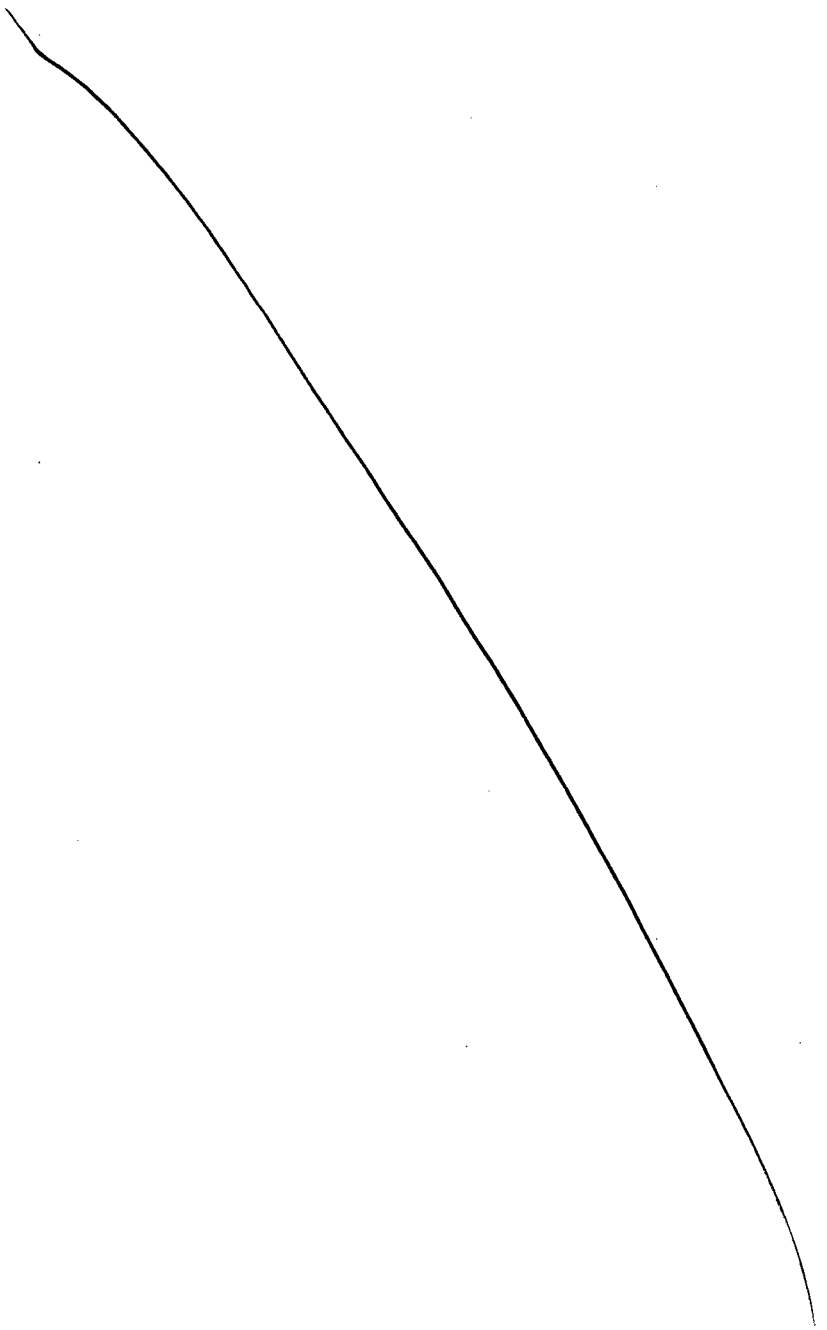
SERIAL 22199

I.D. 4"

LENGTH 50'

TYPE OF ENDS 4-1/16" 10,000 PSI API FLANGES

TYPE OF HOSE 15,000 PSI TEST
CHOKE & KILL



In a Lesser Prairie-Chicken section.

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors			SURFACE	
Segment	**#/ft**	**Grade**	**Coupling**	**Joint**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	54.50	J 55	ST&C	8.87	2.3	1.04	1,063	57,934
"B"							**0**	**0**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,447			**Tail Cmt**	**does not**	**circ to sfc.**	Totals:	1,063	57,934

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	**1109**	2042	**812**	152	**8.90**	1514	**2M**	1.56

9 5/8	casing inside the	13 3/8		Design Factors			INTERMEDIATE	
Segment	**#/ft**	**Grade**	**Coupling**	**Joint**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	40.00	J 55	LT&C	2.57	1.27	0.92	3,900	156,000
"B"	**40.00**	**HCL 80**	**LT&C**	18.10	**1.61**	**1.34**	**1,156**	**46,240**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,063						Totals:	5,056	202,240

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 1063 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	**2034**	4016	**1655**	143	**10.00**	2291	**3M**	0.81
Setting Depths for D V Tool(s):		**3100**					sum of sx	Σ CuFt	Σ%excess
excess cmt by stage % :		**191**	44				1636	3309	100

Class 'C' tail cmt yld > 1.35

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.01, b, c, d All > 0.70, OK.

5 1/2	casing inside the	9 5/8		Design Factors			PRODUCTION	
Segment	**#/ft**	**Grade**	**Coupling**	**Body**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	20.00	P 110	BUTT	3.54	2.63	2.95	8,900	178,000
"B"	**20.00**	**P 110**	**BUTT**	5.17	**2.10**	**2.95**	**4,737**	**94,740**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,958						Totals:	13,637	272,740
B Segment Design Factors would be:				194.27	2.59	if it were a vertical wellbore.		

No Pilot Hole Planned	MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC
	13637	9065	9065	8900	91	17	9420

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 5056 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	**3800**	8132	**3491**	133	**9.10**			1.35

Class 'H' tail cmt yld > 1.20

In a Lesser Prairie-Chicken section.

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors			SURFACE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	54.50	J 55	ST&C	8.87	2.3	1.04	1,063	57,934
"B"							0	0
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,447	Tail Cmt	does not	circ to sfc.		Totals:	1,063	57,934

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	1109	2042	812	152	8.90	1514	2M	1.56

9 5/8	casing inside the	13 3/8		Design Factors			INTERMEDIATE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	40.00	J 55	LT&C	2.57	1.27	0.92	3,900	156,000
"B"	40.00	HCL 80	LT&C	18.10	1.61	1.34	1,156	46,240
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,063					Totals:	5,056	202,240

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 1063 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	2034	4016	1655	143	10.00	2291	3M	0.81
Setting Depths for D V Tool(s):		3100					sum of sx	Σ CuFt	Σ%excess
excess cmt by stage % :		191	44				1636	3309	100

Class 'C' tail cmt yld > 1.35

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.01, b, c, d All > 0.70, OK.

5 1/2	casing inside the	9 5/8		Design Factors			PRODUCTION	
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	Weight
"A"	20.00	P 110	BUTT	3.54	2.63	2.95	8,900	178,000
"B"	20.00	P 110	BUTT	5.17	2.10	2.95	4,737	94,740
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,958					Totals:	13,637	272,740

B Segment Design Factors would be: 194.27 2.59 if it were a vertical wellbore.

No Pilot Hole Planned

MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC
13637	9065	9065	8900	91	17	9420

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 5056 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	3800	8132	3491	133	9.10			1.35

Class 'H' tail cmt yld > 1.20

In a Lesser Prairie-Chicken section.

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors			SURFACE	
Segment	**#/ft**	**Grade**	**Coupling**	**Joint**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	54.50	J 55	ST&C	8.87	2.3	1.04	1,063	57,934
"B"							**0**	**0**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,447			**Tail Cmt**	**does not**	**circ to sfc.**	Totals:	1,063	57,934

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	**1109**	2042	**812**	152	**8.90**	1514	**2M**	1.56

9 5/8	casing inside the	13 3/8		Design Factors			INTERMEDIATE	
Segment	**#/ft**	**Grade**	**Coupling**	**Joint**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	40.00	J 55	LT&C	2.57	1.27	0.92	3,900	156,000
"B"	**40.00**	**HCL 80**	**LT&C**	18.10	**1.61**	**1.34**	**1,156**	**46,240**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,063						Totals:	5,056	202,240

The cement volume(s) are intended to achieve a top of **0** **ft from surface or a** **1063** **overlap.**

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	**2034**	4016	**1655**	143	**10.00**	2291	**3M**	0.81
Setting Depths for D V Tool(s):		**3100**					sum of sx	Σ CuFt	Σ%excess
excess cmt by stage % :		**191**	44				1636	3309	100

Class 'C' tail cmt yld > 1.35

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.01, b, c, d All > 0.70, OK.

5 1/2	casing inside the	9 5/8		Design Factors			PRODUCTION	
Segment	**#/ft**	**Grade**	**Coupling**	**Body**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	20.00	P 110	BUTT	3.54	2.63	2.95	8,900	178,000
"B"	**20.00**	**P 110**	**BUTT**	5.17	**2.10**	**2.95**	**4,737**	**94,740**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,958						Totals:	13,637	272,740
B Segment Design Factors would be:				194.27	2.59	if it were a vertical wellbore.		

No Pilot Hole Planned

MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC
13637	9065	9065	8900	91	17	9420

The cement volume(s) are intended to achieve a top of **0** **ft from surface or a** **5056** **overlap.**

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	**3800**	8132	**3491**	133	**9.10**			1.35

Class 'H' tail cmt yld > 1.20

In a Lesser Prairie-Chicken section.

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors			SURFACE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	54.50	J 55	ST&C	8.87	2.3	1.04	1,063	57,934
"B"							0	0
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,447	Tail Cmt	does not	circ to sfc.		Totals:	1,063	57,934

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	1109	2042	812	152	8.90	1514	2M	1.56

9 5/8	casing inside the	13 3/8		Design Factors			INTERMEDIATE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	40.00	J 55	LT&C	2.57	1.27	0.92	3,900	156,000
"B"	40.00	HCL 80	LT&C	18.10	1.61	1.34	1,156	46,240
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,063					Totals:	5,056	202,240

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 1063 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	2034	4016	1655	143	10.00	2291	3M	0.81
Setting Depths for D V Tool(s):		3100					sum of sx	Σ CuFt	Σ%excess
excess cmt by stage % :		191	44				1636	3309	100

Class 'C' tail cmt yld > 1.35

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.01, b, c, d All > 0.70, OK.

5 1/2	casing inside the	9 5/8		Design Factors			PRODUCTION	
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	Weight
"A"	17.00	P 110	BUTT	3.54	1.78	2.48	8,900	151,300
"B"	17.00	P 110	BUTT	5.18	1.46	2.48	4,737	80,529
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,958					Totals:	13,637	231,829
B	Segment Design Factors would be:			194.60	1.75	if it were a vertical wellbore.		

No Pilot Hole Planned

MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC
13637	9065	9065	8900	91	17	9420

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 5056 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	3800	8132	3492	133	9.10			1.35

Class 'H' tail cmt yld > 1.20

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: There is an existing production facility that is used for the Copperline West 29 Fed 1H and 3H wells. This facility and containment will be used for the 5H. Tankage and a metered 3 phase separator will be added to the existing facility. The pad will have all 3 wells on it.
Production Facilities map:

Copperline_West_29_Federal_Production_Facility_08-23-2017.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING

Water source type: GW WELL

Describe type:

Source latitude:

Source longitude:

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT

Source land ownership: FEDERAL

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 180000

Source volume (acre-feet): 23.200758

Source volume (gal): 7560000

Water source and transportation map:

Copperline_West_29_Federal_7H_Water_Supply_Map_08-23-2017.pdf

Water source comments: Water will be supplied by the surface tenant's water well, Limestone Livestock LLC. Bill Angell Limestone Livestock, LLC 76 Angell Road Lovington, NM 88260 575-369-6303
New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: caliche from existing location and from pit

Construction Materials source location attachment:

Copperline_West_29_Fed_7H_Construction_Material_Map_20180505080851.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 1163640 pounds

Waste disposal frequency : Daily

Safe containment description: roll off bins

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: R360 commercial disposal facility

Waste type: DRILLING

Waste content description: Drill fluids

Amount of waste: 2500 barrels

Waste disposal frequency : Weekly

Safe containment description: rig mud tanks

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: Siana SWD

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Copperline_West_29_Federal_7H_Well_Site_Layout_20171222083423.pdf

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance **Multiple Well Pad Name:** WEST COPPERLINE 29 FEDERAL

Multiple Well Pad Number: 3H

Recontouring attachment:

Drainage/Erosion control construction: Per BLM instructions as identified during onsite

Drainage/Erosion control reclamation: Per BLM instructions as identified during onsite

Wellpad long term disturbance (acres): 2

Wellpad short term disturbance (acres): 4

Access road long term disturbance (acres): 0.03

Access road short term disturbance (acres): 0.03

Pipeline long term disturbance (acres): 0

Pipeline short term disturbance (acres): 0

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 2.03

Total short term disturbance: 4.03

Disturbance Comments:

Reconstruction method: Interim reclamation as identified during onsite

Topsoil redistribution: Interim reclamation as identified during onsite

Soil treatment: Interim reclamation as identified during onsite

Existing Vegetation at the well pad: age brush and native grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Sage brush and native grasses

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: Sage brush and native grasses

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Sage brush and native grasses

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Kevin

Last Name: Garrett

Phone: (432)556-8508

Email: kgarrett@cazapetro.com

Seedbed prep: Harrow

Seed BMP: Per BLM instructions

Seed method: Broadcast followed by a drag chain

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: Spray for cheat grass

Weed treatment plan attachment:

Monitoring plan description: Visual inspection in spring and late fall

Monitoring plan attachment:

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Success standards: 80% coverage by 2nd growing season of native species with less than 5% invasive species

Pit closure description: No pits to be used

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

[redacted]

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

[redacted]

Email:

Surface use plan certification document:

W_Copperline_Executed_Surface_Agmt_and_Amdt_20180809132430.pdf

[redacted]

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

SUPO Additional Information:

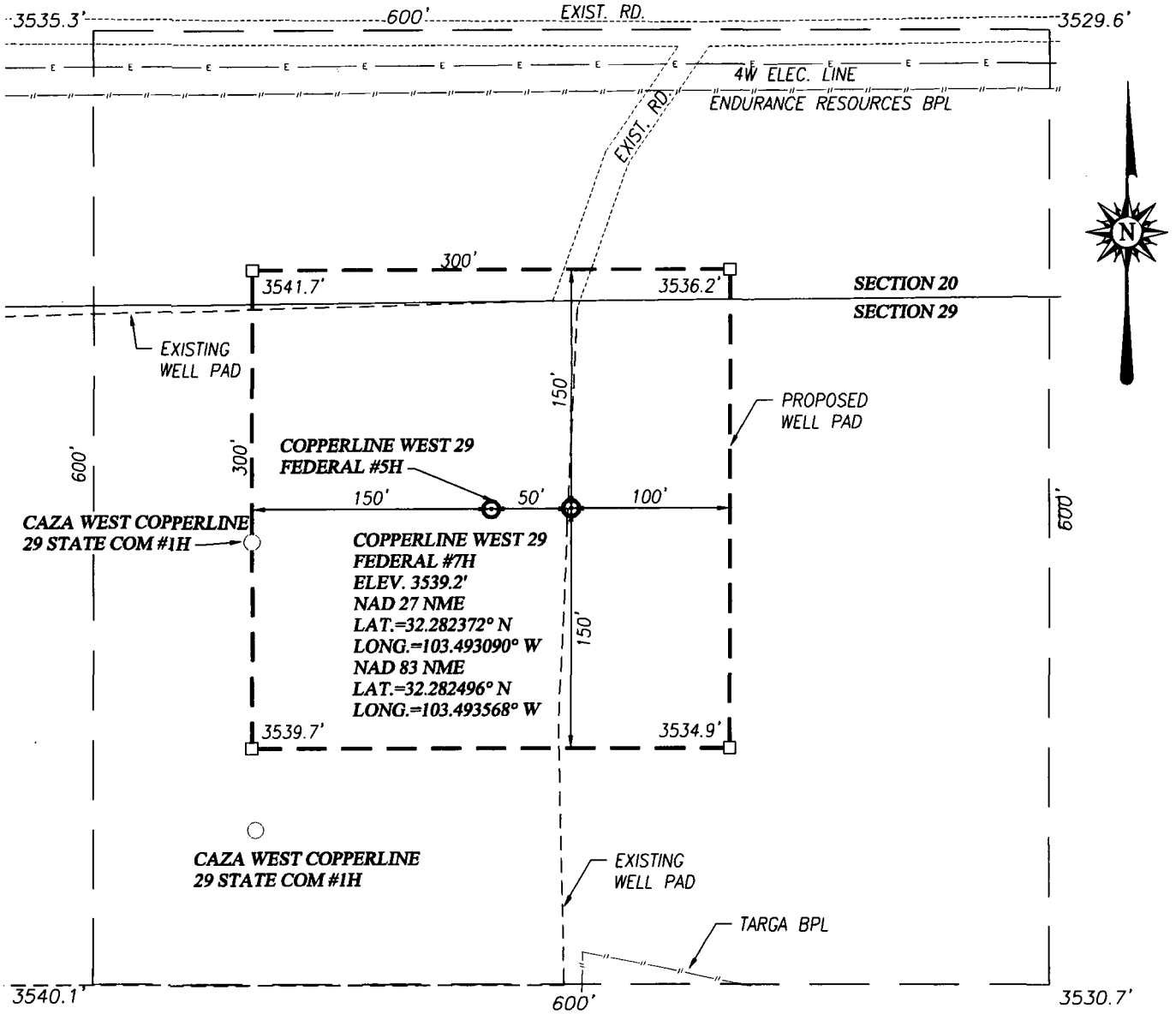
Use a previously conducted onsite? YES

Previous onsite information for Copperline West 29 Federal 7H. It is requested that the APD be approved. Unsure of the exact date of the onsite.

Other SUPO Attachment

Copperline_West_29_Federal_7H_Interim_Reclamation_Plat_20180505073834.pdf

WELL SITE PLAN



NOTE:
1) SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION.

100 0 100 200 Feet

Scale: 1"=100'

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF DELAWARE BASIN ROAD AND ST. 128, GO NORTH ON DELAWARE BASIN ROAD FOR 5.5 MILES, TURN RIGHT AND GO EAST 0.8 MILES,TURN LEFT AND GO NORTHEAST APPROX. 0.15 MILES, TURN RIGHT AND GO EAST APPROX. 0.3 MILES TURN RIGHT AND GO SOUTH APPROX. 326 FEET TO THE LOCATION ON THE EXISTING PAD.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz
TBPLS# 10021000

CAZA OPERATING, LLC

COPPERLINE WEST 29 FEDERAL #7H WELL LOCATED 130 FEET FROM THE NORTH LINE AND 2180 FEET FROM THE WEST LINE OF SECTION 29, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 7/25/16	CAD Date: 7/27/16	Drawn By: LSL	
W.O. No.: 16110555	Rev: .	Rel. W.O.:	Sheet 1 of 1

Caza Petroleum

February 26, 2014

Mr. Bill Angell
Limestone Livestock LLC
P. O. Box 189
Lovington, New Mexico

Re: Amendment to Surface Damage Agreement
Section 29, T23S-R34E
W. Copperline Prospect
Lea County, New Mexico

Dear Bill:
Reference is hereby made to that certain Surface Damage Agreement ("Surface Damage Agreement) dated August 19, 2013, covering the NW/4 Section 29, T23S-R34E, Lea County, New Mexico, by and between Limestone Livestock LLC, "Owner", and Caza Petroleum, Inc., "Company".

Whereas, Owner and Company desire to amend the description in the first paragraph of the Surface Damage Agreement, Owner and Company hereby agree to the following description change, to wit:

Delete:
NW/4 of Section 29, T23S-R34E, Lea County, NM

Add:
W/2 of Section 29, T23S-R34E, Lea County, NM.

All other provisions of the Surface Damage Agreement shall remain unchanged and in full effect.

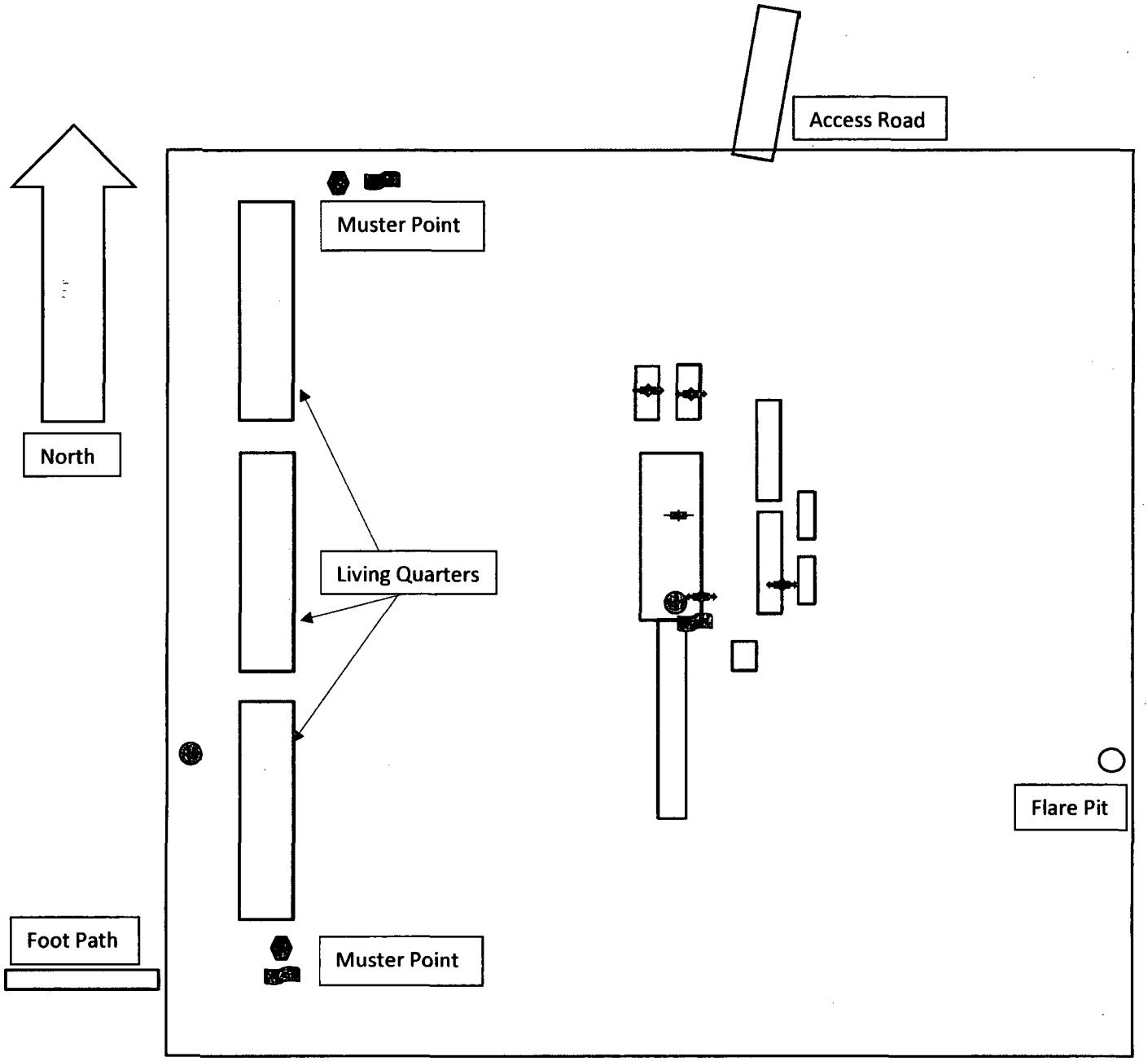
Very truly yours,
Caza Petroleum, Inc.

John E. Brown, CPL
Land Manager

I hereby agree to the foregoing description change this ___ day of February, 2014.

Limestone Livestock, LLC

By: _____
Bill Angell
Managing Partner



Alarm

Caution Sign

Wind Sock

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

08/31/2018

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000471

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

Operator Name: CAZA OPERATING LLC

Well Name: COPPERLINE WEST 29 FEDERAL **Well Number:** 7H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	330	FSL	2275	FWL	23S	34E	29	Aliquot SESW	32.269127	-103.492761	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 092199	-5523	13637	9062
BHL Leg #1	330	FSL	2275	FWL	23S	34E	29	Aliquot SESW	32.269251	-103.493239	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 092199	-5523	13637	9062