

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OGD
JUN 18 2012
RECEIVED

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address CAZA OPERATING, LLC. 200 NORTH LORAIN SUITE 1550 MIDLAND, TEXAS 79701		OGRID Number 249099
Property Code 39020		Property Name CAZA RIDGE "14" STATE # 3
Proposed Pool 1 ANTELOPE RIDGE BONE SPRING-WEST (2209)		Proposed Pool 2

7 Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	14	23S	34E		330'	SOUTH	1980'	EAST	LEA

8 Proposed 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
B	14	23S	34E		330'	NORTH	1980'	EAST	LEA

Work Type Code N	Well Type Code O	Cable/Rotary ROTARY	Lease Type Code S	Ground Level Elevation 3372'
Multiple NO	Proposed Depth MD-15, 739'	Formation WOLFCAMP	Contractor UNKNOWN	Spud Date WHEN APPROVED

TVD-11,500'

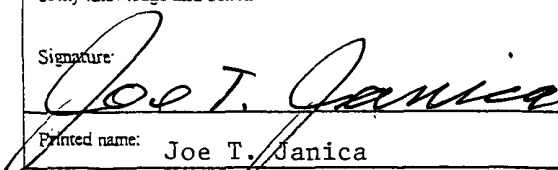
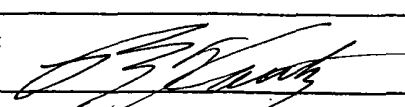
21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	Conductor	40'	Redi-mix	Surface
17 1/2"	13 3/8"	54.5#	750'	456 Sx.	Surface
12 1/4"	9 5/8"	43.5 & 40#	4950'	1156 Sx.	Surface
8 1/2" & 7 7/8"	5 1/2"	20 & 17#	15,574'	2510 Sx	4400' FS

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHED SHEET FOR DETAIL

Permit Expires 2 Years From Approval
Date Unless Drilling Underway

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: 		Approved by: 	
Printed name: Joe T. Janica		Title: PETROLEUM ENGINEER	
Title: Permit Eng.		Approval Date: JUN 18 2012	
E-mail Address: joejanica@valornet.com		Expiration Date:	
Date: 06/14/12	Phone: 575-391-8503	Conditions of Approval Attached ☐	

JUN 18 2012

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 750'. Run and set 750' of 13 3/8" 54.5# J-55 LT&C casing. Cement with 256 Sx. of 35/65/4 Class "C" POZ cement + 5% Salt, + 3% SMS, Yield 2.156, Tail in with 200 Sx. of Class "C" cement + 2% CaCl, Yield 1.34, Circulate cement to surface.
3. Drill 12½" hole to 4950'. Run and set 4950' of 9 5/8" casing as follows: 1650' of 9 5/8" 43.5# N-80 LT&C casing, 3300' of 9 5/8" 40# J-55 LT&C casing. Cement with 956 Sx. of 35/65 Class "C" POZ cement + 5% Salt, + 6% Bentonite, Yield 2.09, tail in with 200 Sx. of Class "C" cement + 1% CaCl, Yield 1.32, circulate cement to surface.
4. Drill 8½" hole to 11,589'. Run open hole logs: Cement pilot hole with 503 Sx. Class "H" cement + 5% Salt, Yield .95 cu/sx. Drill cement plug to KO point at 10,739'± drill 8½" hole to end of curve change to 7 7/8" bit and drill to TD MD-15,739 TVD-11,315. Run and set 5½" casing as follows: 5039' of 5½" 20# P-110 LT&C, 10700' of 5½" 17# P-110 LT&C casing. Cement in two stages set DV Tool at 7000'. Cement 1st stage with 1091 Sx of 50/50 Class "H" POZ cement + additives, Yield, 1.3, tail in with 823 Sx. of Class "H" cement + expansion additives Yield 1.18. Cement 2nd stage with 496 Sx. of 50/50 Class "H" POZ cement + 5# Gilsonite/Sx. , .125# Cello Flakes/Sx. + 0.25% Econolite, Yield 1.32, tail in with 100 Sx. of Class "C" + additives, Yield 1.32 estimate top of cement 4400' from surface.

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

HOBBS OGD

JUN 13 2012

RECEIVED

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-40621	Pool Code 2209	Pool Name ANTELOPE RIDGE BONE SPRING-WEST
Property Code 39020	Property Name CAZA RIDGE 14 STATE	Well Number 3H
OGRID No. 249099	Operator Name CAZA OPERATING, LLC	Elevation 3372'

Surface Location

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	14	23-S	34-E		330	SOUTH	1980	EAST	LEA

Bottom Hole Location If Different From Surface

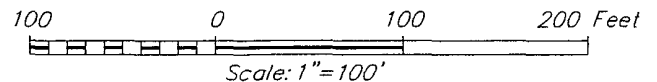
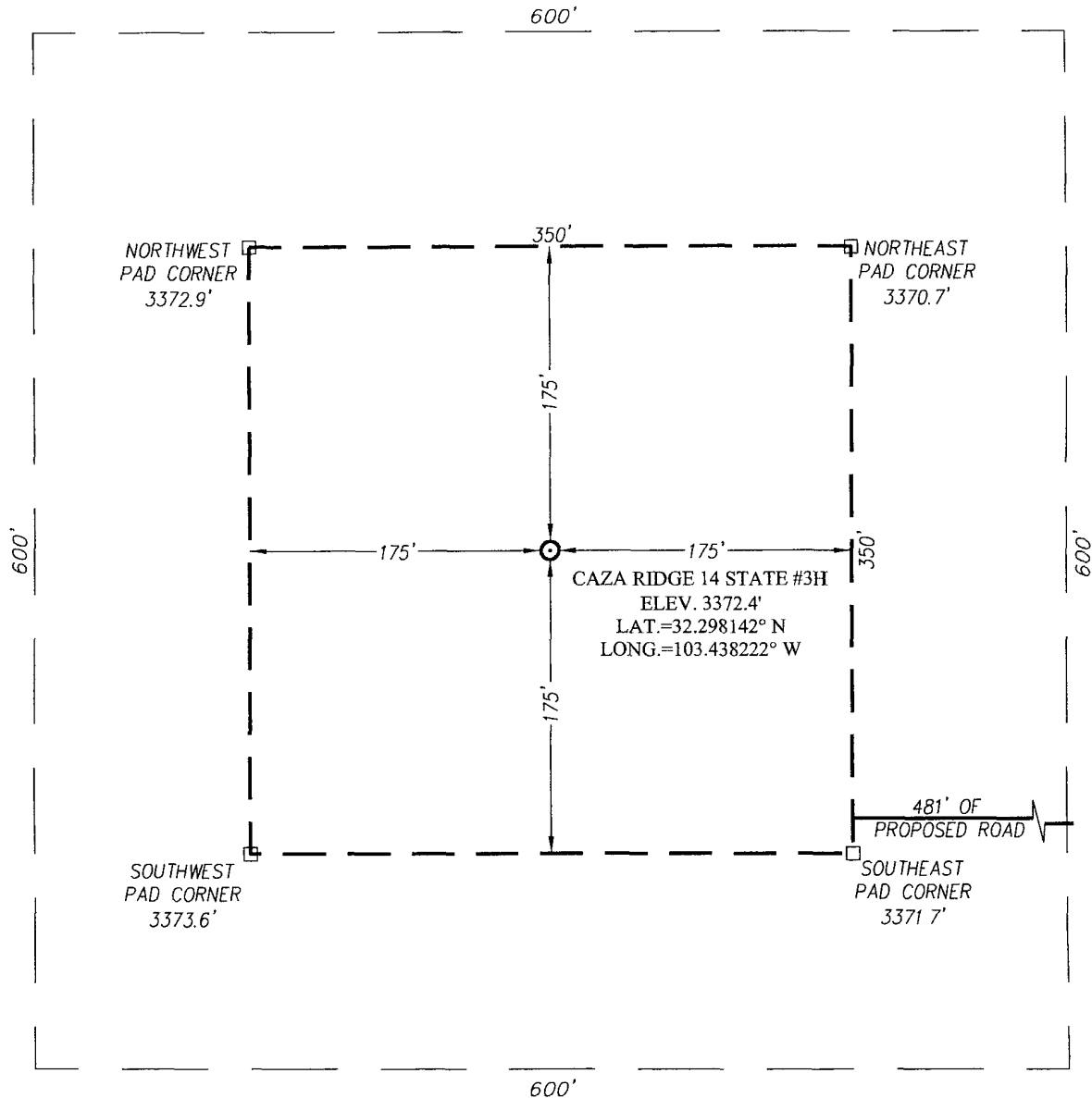
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	14	23-S	34-E		330	NORTH	1980	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No
160			

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

GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=473335.4 N X=776583.0 E LAT.=32.298142° N LONG.=103.438222° W BOTTOM HOLE LOCATION Y=477953.9 N X=776540.2 E PROJECT AREA PRODUCING AREA CORNER COORDINATES TABLE A) Y=478278.1 N, X=775873.9 E B) Y=478289.6 N, X=777195.2 E C) Y=473010.8 N, X=777244.2 E D) Y=473000.1 N, X=775922.9 E	GRID. AZ. = 359°28'03" HORIZ. DIST. = 4619.6' POE FSL & 1980' FEL	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division Signature: <i>Joe T. Janica</i> Date: 06/14/12 Printed Name: Joe T. Janica E-mail Address: joejanica@valornet.com 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 MAY 25, 2012 Date of Survey Signature & Seal of Professional Surveyor: Certificate Number: 12641 Gary G. Eidson Ronald J. Eidson 3239 AF
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SECTION 14, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD E-21 (DELAWARE BASIN) AND CO. RD. E-21 (ANTELOPE RIDGE) GO EAST ON CO. RD. E-21 APPROX. 2.1 MILES. TURN RIGHT AND GO SOUTH APPROX. 1.9 MILES. FOLLOW ACCESS ROAD WEST APPROX. 650 FEET TO THIS LOCATION STAKE.



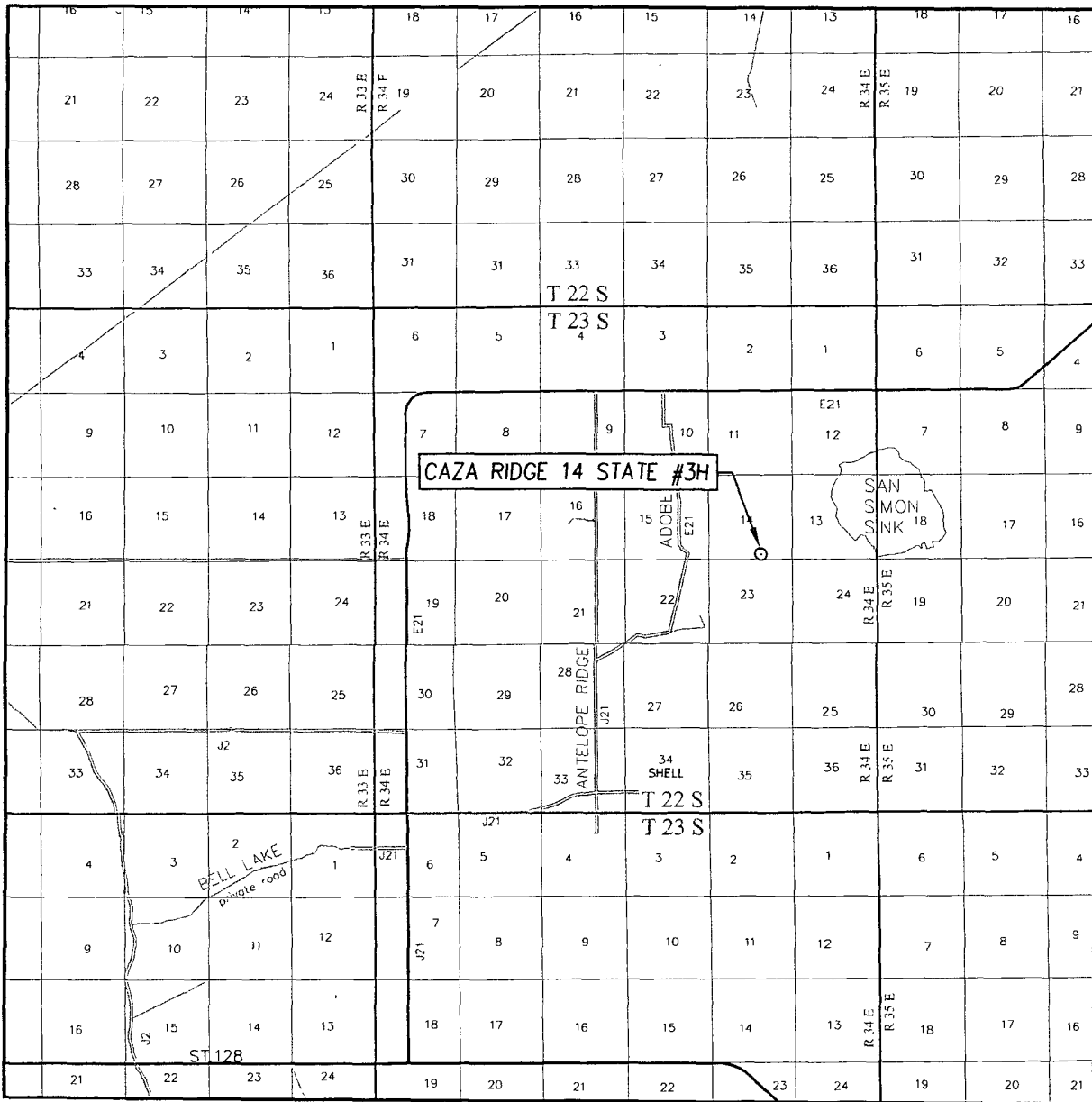
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

CAZA OPERATING, LLC

CAZA RIDGE 14 STATE #3H WELL
LOCATED 330 FEET FROM THE SOUTH LINE
AND 1980 FEET FROM THE EAST LINE OF SECTION 14,
TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO

Survey Date: 5/25/12	CAD Date: 6/4/12	Drawn By: AF
W O No.: 12110984	Rev: .	Rel W.O.: Sheet 1 of 1

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 14 TWP. 23-S RGE. 34-E

SURVEY N.M.P.M.

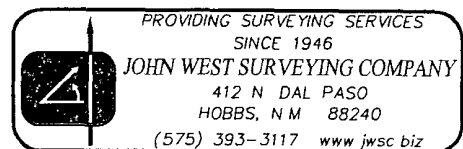
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 330' FSL & 1980' FEL

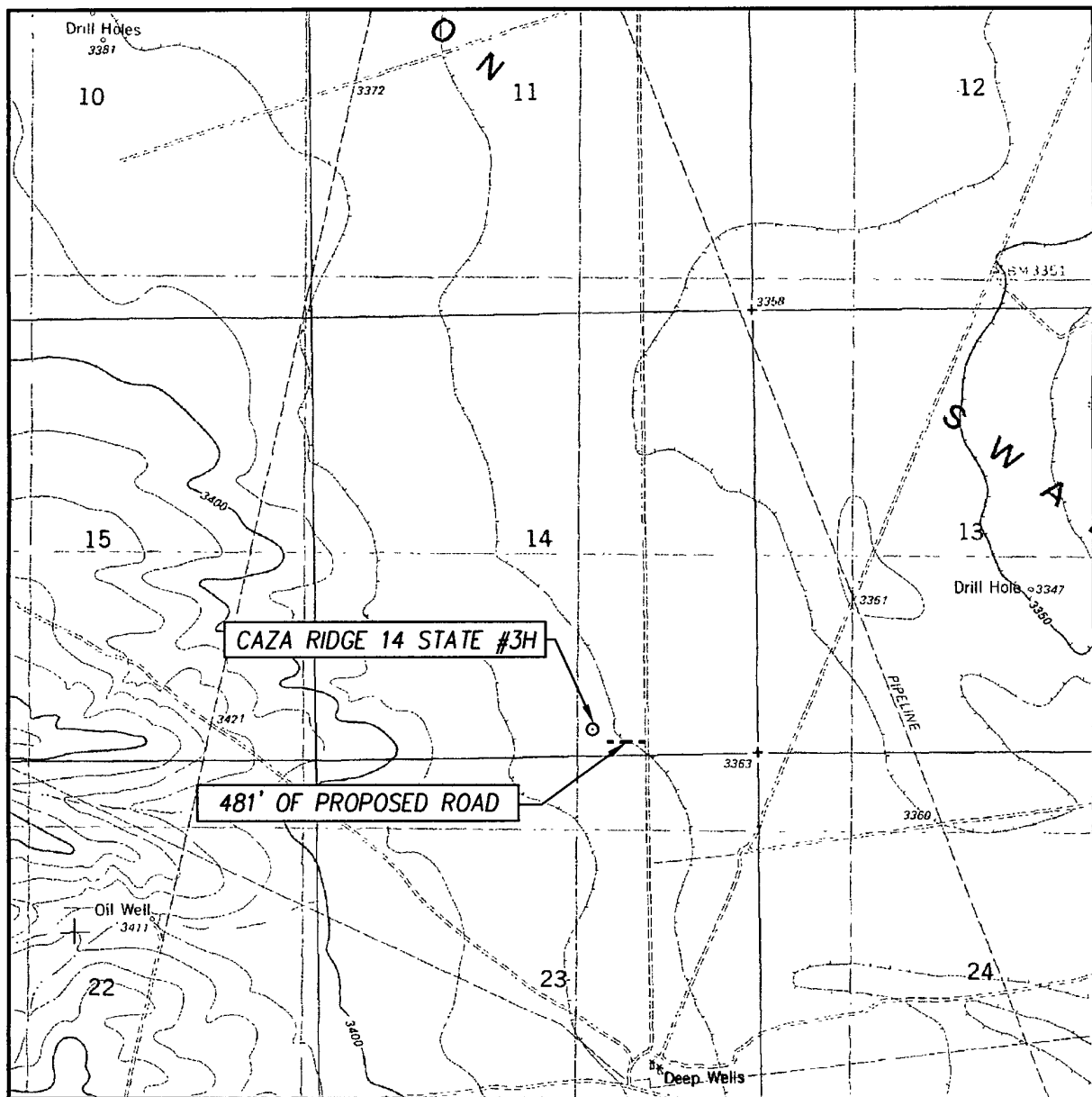
ELEVATION 3372'

OPERATOR CAZA OPERATING, LLC

LEASE CAZA RIDGE 14 STATE



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
SAN SIMON SINK, N.M. - 10'

SEC. 14 TWP. 23-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

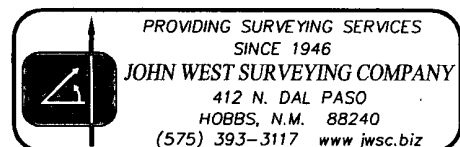
DESCRIPTION 330' FSL & 1980' FEL

ELEVATION 3372'

OPERATOR CAZA OPERATING, LLC

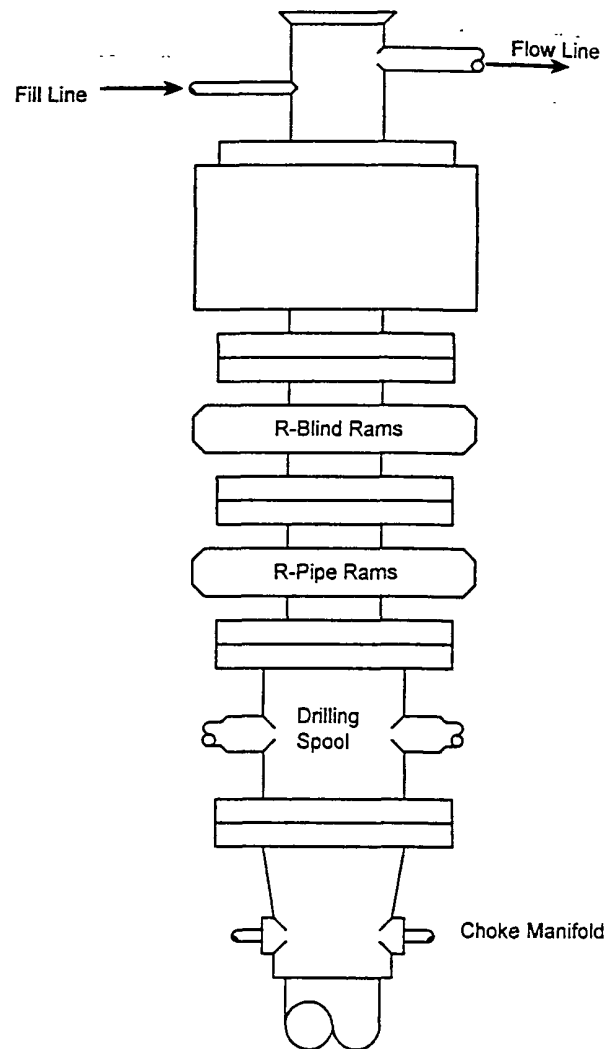
LEASE CAZA RIDGE 14 STATE

U.S.G.S. TOPOGRAPHIC MAP
SAN SIMON SINK, N.M.



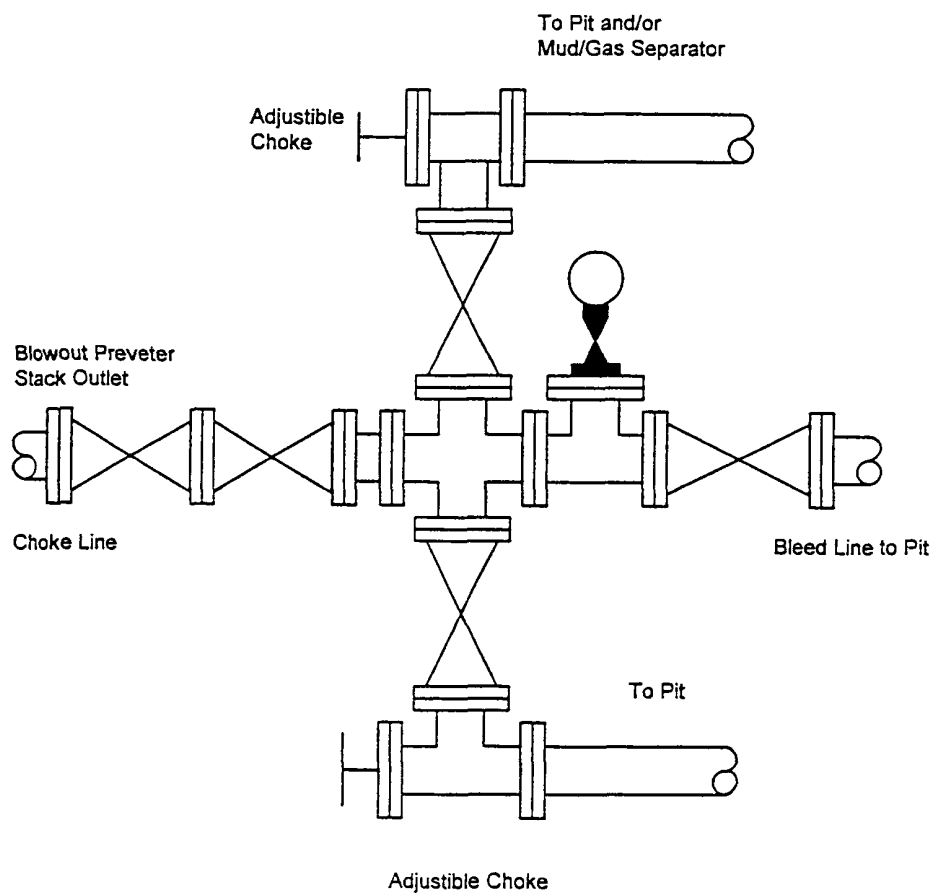
BLOWOUT PREVENTER SYSTEM

5000 PSI



Type 1500 SERIES
5000 psi WP

Choke Manifold Assembly for 5M WP System



**Caza Operating, LLC
Caza Ridge 14 State # 3H
Hydrogen Sulfide Contingency Plan
For Drilling/Workover/Facility**

330 FSL & 1980 FEL, SEC 14, T23S, R34E, LEA COUNTY, NEW MEXICO

This well and its anticipated facility are not expected to have Hydrogen Sulfide releases. However, there may be Hydrogen Sulfide production in the nearby area. Caza Operating will have a Company Representative on location throughout the drilling and Completion of this well as long as there is activity on site. An un-man H₂S safety trailer and monitoring equipment will also be station on location during the drilling and completion operations.

Caza Operating, LLC
Caza Ridge 14 State # 3H
Hydrogen Sulfide Contingency Plan
For Drilling/Workover/Facility

330 FSL & 1980 FEL, SEC 14, T23S, R34E, LEA COUNTY, NEW MEXICO

If at this time the supervising person determines the release of H2S cannot be contained to the site location and the general public is in harm's way he will take the necessary steps to protect the workers and the public.

EMERGENCY CALL LIST: (Start and continue until ONE of these people have been contacted)

	<u>OFFICE</u>	<u>MOBILE</u>	<u>HOME</u>
Caza Operating,LLC.	432 682 7424		
Richard Wright	432 682 7424	432 556 7595	432 699 7108
Tony Sam	432 682 7424	432 556 6708	432 689 0709

EMERGENCY RESPONSE NUMBERS:

State Police:	Eddy County		575 748 9718
State Police:	Lea County		575 392 5588
Sheriff	Eddy County		575 746 2701
Sheriff	Lea County		
Emergency Medical Ser	Eddy County		911 or 575 746 2701
(Ambulance)	Lea County	Eunice	911 or 575 394 3258
Emergency Response	Eddy County SERC		575 476 9620
	Lea County		
Artesia Police Dept			575 746 5001
Artesia Fire Dept			575 746 5001
Carlsbad Police Dept			575 885 2111
Carlsbad Fire Dept			575 885 3125
Loco Hills Police Dept			575 677 2349
Jal Police Dept			575 395 2501
Jal Fire Dept			575 395 2221

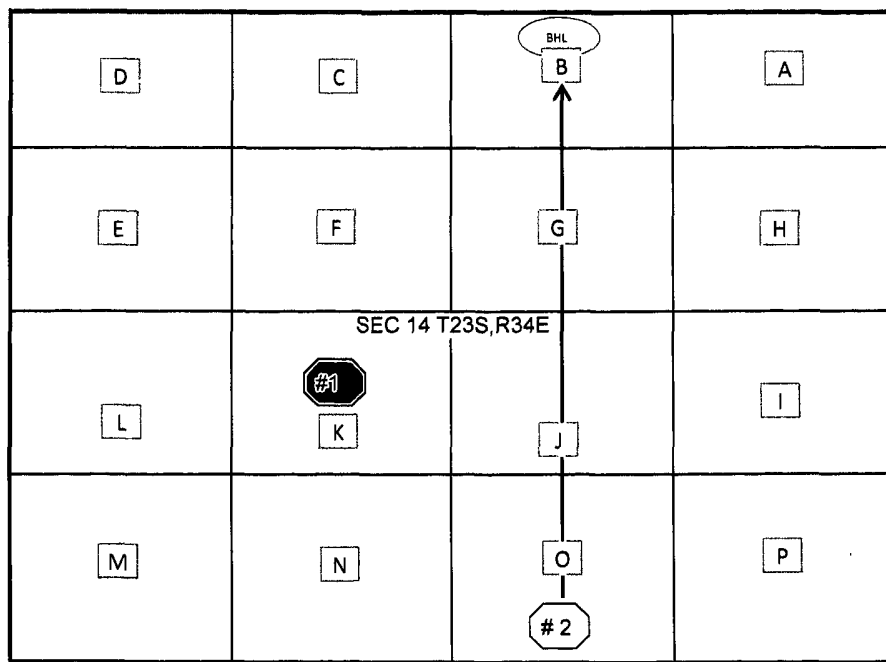
Caza Operating, LLC
Caza Ridge 14 State # 3H
Hydrogen Sulfide Contingency Plan
For Drilling/Workover/Facility

330 FSL & 1980 FEL, SEC 14, T23S, R34E, LEA COUNTY, NEW MEXICO

Jal ambulance		505 395 2221
Eunice Police Dept		575 394 0112
Eunice Fire Dept		575 394 3258
Eunice Ambulance		575 394 3258
Hobbs Police Dept		
NMOCD	District 1 (Lea, Roosevelt, Curry)	575 393 6161
	District 2 (Eddy Chavez)	575 748 1283
BLM	Carlsbad	575 887 6544
Lea County Information		575 393 8203
Indian Fire & Safety	Lea/Eddy County	575 393 3093
Safety & Environmental Sol	Lea/Eddy County	575 397 0510
Baker pmp'g Services	Artesia	575 746 3140
	Hobbs	575 392 5556
Halliburton	Artesia	1 800 523 2482
	Hobbs	1 800 523 2482
Wild Well Control	Midland	432 550 6202
	Mobile	432 553 1166
	Houston	281 784 4700
Blow Out Tools (BTI)	Odessa	432 385 3000
	Houston	281 784 4700

Caza Ridge 14 # State #3H_ Bone Springs Horizontal

Sec 14, T-23-S, R-34-E, Lea County, New Mexico



Well Name	Surface Location	Depth and Strata	Current Prod Zone	Bottom Hole Location 8350 tvd	
Caza Ridge 14 # 3H	330 FSL & 1980 FEL	TD = 11,750 Wolfcamp	3rd Bone Test	330 FNL & 1980 FEL	Caza Operating, LLC
Supron Fed 14 Com #1	1980 FSL & 1980 FWL	TD = 13,600 Penn	Producing 13 BCF	Same	Hunt Oil-Atoka Morrow Dual
8006 JV-P Ridge #1	1980 FSL & 1980 FEL	TD = 13,543 Penn	Plugged	Vertical	BTA Plugged

LONG's METHOD OF SURVEY COMPUTATION

OBLIQUE CIRCULAR ARC INTERPOLATION

6000	MD OF INTERPOLATION DEPTH,(feet)
#N/A	TVD COORDINATE OF THE DEPTH (feet)
#N/A	N/S COORDINATE OF DEPTH (feet)
#N/A	E/W COORDINATE OF DEPTH (feet)

3 D DISTANCE BETWEEN STATION A AND STATION B

DISTANCE TABLE

STATION A	STATION B
400.00	600.00
300.00	400.00
100.00	300.00
300.00	ft

TABLE OF SURVEY STATIONS

Calculator =

STA #	ΔMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N+S- ft	E+W- ft	DLS deg/100FT
1	TIE POINT =>	0	0	10739.00	10739.00	0.00	0.00	-
2	100	8	0	10839.00	10838.68	6.97	0.00	8.00
3	100	12	0	10939.00	10937.14	24.33	0.00	4.00
4	100	24	0	11039.00	11032.07	55.18	0.00	12.00
5	100	36	0	11139.00	11118.51	105.09	0.00	12.00
6	100	48	0	11239.00	11192.69	171.88	0.00	12.00
7	100	60	0	11339.00	11251.36	252.63	0.00	12.00
8	100	72	0	11439.00	11291.96	343.82	0.00	12.00
9	100	84	0	11539.00	11312.71	441.45	0.00	12.00
10	50	90	0	11589.00	11315.33	491.36	0.00	12.00
11	100	90	0	11689.00	11315.33	591.36	0.00	0.00
12	100	90	0	11789.00	11315.33	691.36	0.00	0.00
13	100	90	0	11889.00	11315.33	791.36	0.00	0.00
14	100	90	0	11989.00	11315.33	891.36	0.00	0.00
15	100	90	0	12089.00	11315.33	991.36	0.00	0.00
16	100	90	0	12189.00	11315.33	1091.36	0.00	0.00
17	100	90	0	12289.00	11315.33	1191.36	0.00	0.00
18	100	90	0	12389.00	11315.33	1291.36	0.00	0.00
19	100	90	0	12489.00	11315.33	1391.36	0.00	0.00
20	100	90	0	12589.00	11315.33	1491.36	0.00	0.00
21	100	90	0	12689.00	11315.33	1591.36	0.00	0.00
22	100	90	0	12789.00	11315.33	1691.36	0.00	0.00
23	100	90	0	12889.00	11315.33	1791.36	0.00	0.00
24	100	90	0	12989.00	11315.33	1891.36	0.00	0.00
25	100	90	0	13089.00	11315.33	1991.36	0.00	0.00
26	100	90	0	13189.00	11315.33	2091.36	0.00	0.00
27	100	90	0	13289.00	11315.33	2191.36	0.00	0.00
28	100	90	0	13389.00	11315.33	2291.36	0.00	0.00
29	100	90	0	13489.00	11315.33	2391.36	0.00	0.00
30	100	90	0	13589.00	11315.33	2491.36	0.00	0.00
31	100	90	0	13689.00	11315.33	2591.36	0.00	0.00
32	100	90	0	13789.00	11315.33	2691.36	0.00	0.00
33	100	90	0	13889.00	11315.33	2791.36	0.00	0.00
34	100	90	0	13989.00	11315.33	2891.36	0.00	0.00
35	100	90	0	14089.00	11315.33	2991.36	0.00	0.00
36	100	90	0	14189.00	11315.33	3091.36	0.00	0.00
37	100	90	0	14289.00	11315.33	3191.36	0.00	0.00
38	100	90	0	14389.00	11315.33	3291.36	0.00	0.00
39	100	90	0	14489.00	11315.33	3391.36	0.00	0.00
40	100	90	0	14589.00	11315.33	3491.36	0.00	0.00
41	100	90	0	14689.00	11315.33	3591.36	0.00	0.00
42	100	90	0	14789.00	11315.33	3691.36	0.00	0.00
43	100	90	0	14889.00	11315.33	3791.36	0.00	0.00
44	100	90	0	14989.00	11315.33	3891.36	0.00	0.00
45	100	90	0	15089.00	11315.33	3991.36	0.00	0.00
46	100	90	0	15189.00	11315.33	4091.36	0.00	0.00
47	100	90	0	15289.00	11315.33	4191.36	0.00	0.00
48	100	90	0	15389.00	11315.33	4291.36	0.00	0.00
49	100	90	0	15489.00	11315.33	4391.36	0.00	0.00
50	100	90	0	15589.00	11315.33	4491.36	0.00	0.00
51	100	90	0	15689.00	11315.33	4591.36	0.00	0.00
52	50	90	0	15739.00	11315.33	4641.36	0.00	0.00

Caza Ridge 14 State # 3H

Location: 330 FSL & 1980 FEL, Section 14, T-23-S, R-34-E, Lea County, New Mexico

BHL ± 330 FNL & 1980 FEL SECTION 14

Depth (TVD-ft)	Wellbore Sketch	Bits / BHA	Drilling Fluids	Straight Hole - Survey Plans	Cement	Formation Evalua	
1000		20" Cond Pipe @ ± 40'	17.5" Hole Tri-Cone Bit "Rental" Slick Assembly	8.8 ppg Spud mud Should maintain FV 34-36 sec/qt No Control on Fluid Loss Paper Sweeps for hole cleaning	Take Totco surveys every 250' Increase Totco surveys if excess deviation is encountered	No Cement Required for Conductor Class "C" w/ 500 psi minimum Compressive in 24 hrs	not required
2000		13.375" 48# H-40 STC @ 750 ft	12.25" Hole PDC Bit Planned Packed Assembly w/ Motor	Drill out with 10 ppg Brne Wtr	Take Totco Surveys every 500 ft Increase Surveys if deviation above 3°		
3000				Drill out with 8.5 ppg Fresh Wtr	Take Totco Surveys every 500 ft Increase Surveys if deviation above 3°		
4000				Paper Sweeps for hole cleaning			
5000		9.625" 43.5# & 40# J-55 & N- 80 LTC @ 4950 ft		Paper Sweeps for hole cleaning		Class "C" w/ 500 psi minimum Compressive in 24 hrs 250 sks 1.32 yield Tail	Rig Up Mud Logger before
6000			8.5" Hole PDC Bit Planned Packed Hole Assembly		Take Totco Surveys every 500 ft Increase Surveys if deviation above 3°		Formation Tops: Anhydrite = 1395' Bell Cyn= 4985' Delaware Sand 5130' Cherry Cyn= 6150' Brushy Cyn= 7400' Upper Bone Sprgs sd & 1st BS Sd 9,650 2nd BS = 10,150' 3rd BS Lm = 10,550' 3rd BS Sd = 11,050' Wlfc = 11,500' Total Depth 11,500'.
7000		5-1/2" Stage Tool ±7000'					
8000				Paper Sweeps for hole cleaning			
9000			Agitating sub may be needed	paper Sweeps for hole Cleaning			
10000		5-1/2" 17# & 20# P-110 LTC & BTC Casing	Curve 8.5" Hole Lateral 7.875" Hole	paper Sweeps for hole Cleaning	8.50" curve with 7.875" lateral. 12° build on curve AZIMUTH PLANNED ± 360° KOP planned 10,739 ft TVD of lateral planned 11,315 ft. To be adjusted post open hole log	KICK OFF PLUG PLANNED POST DRILLING VERTICAL See Cmt Program for Details on Cement/Stage tool design.	LOG VERTICAL HOLE @ Gr, Neutron/Density, Resr Possible imaging tool, Sic rotary cores
11000		Agitating sub may be needed 8.50" Hole Planned to Total depth of 11,500 ft	Sweep Hole Good @ Total Depth Lubrication needed	15,740 ft Measured depth of lateral Run Gyro from below KOP to surface prior to Plugback	Stage Tools determined post Vertical Drilling	8 stage perf & Plug stim planned with 200,000 lb sand per stage	
12000		TD Vertical 11,500 ft.					