

Split Estate

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

HOBBS OCD

OCD AUG 05 2013
Hobbs

RECEIVED

ATS-13-646

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-92199
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name -----
2. Name of Operator CAZA OPERATING, LLC.		7. If Unit or CA Agreement, Name and No. -----
3a. Address 200 NORTH LORAIN SUITE 1550 MIDLAND, TEXAS 79701		8. Lease Name and Well No. 1H WEST COPPERLINE 29 STATE COM
3b. Phone No. (include area code) 432-682-7424		9. API Well No. 80-025-41313
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 330' FNL & 1980' FWL SECTION 29 T23S-R34E Unit C At proposed prod. zone 330' FSL & 1980' FWL SECTION 29 T23S-R34E Unit A		10. Field and Pool, or Exploratory Bell Lake <5130> ANTELOPE RIDGE-BONE SPRING
14. Distance in miles and direction from nearest town or post office* Approximately 25 miles Northwest of Jal New Mexioc		11. Sec., T. R. M. or Blk. and Survey or Area SECTION 29 T23S-R34E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of acres in lease 480560	12. County or Parish LEA
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. NA	19. Proposed Depth MD-15,882' TVD-11,480'	13. State NM
20. BLM/BIA Bond No. on file NMB-000471	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3540' GL	22. Approximate date work will start* WHEN APPROVED
23. Estimated duration App. 35 days		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

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 required by the BLM.

25. Signature <i>Joe T. Janica</i>	Name (Printed/Typed) Joe T. Janica	Date 05/15/13
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Title
Permit Eng.

Approved by (Signature) <i>/s/George MacDonell</i>	Name (Printed/Typed) George MacDonell	Date JUL 31 2013
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Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE
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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.

APPROVAL FOR TWO YEARS

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.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

AUG 13 2013

Jim

APPLICATION TO DRILL

CAZA OPERATING, LLC.
 WEST COPPERLINE 29 STATE COM. #1H
 UNIT "C" SECTION 29
 T23S-R34E LEA CO. NM

In response to questions asked under Section II of Bulletin NTL-6, the following information on the above well will be provided.

1. LOCATION: SURFACE: 330' FNL & 1980' FWL SECTION 29 T23S-R34E
 BHL: 330' FSL & 1980' FWL SECTION 29 T23S-R34E
2. ELEVATION ABOVE SEA LEVEL: 3540' GL
3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternary Aeolian Deposits;
4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for the removal of solids from the hole.
5. PROPOSED DRILLING DEPTH: TVD: 11,480'
 MD: 15,882'
6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

Rustler Anhydrite	1230'	Cherry Canyon	5995'
Top of Salt	1480'	Brushy Canyon	7265'
Base of Salt	3900' ??	Bone Spring/Glorieta	8615'
7 Rivers	Not Present	1st Bone Spring	9739'
Capitan	Not Present	2nd Bone Spring	10,269'
Bell Canyon	5157'	3rd Bone Spring	11,213'
7. POSSIBLE MINERAL BEARING FORMATIONS:

Bell Canyon	Oil/Water	2nd Bone Spring	Oil/Water
Cherry Canyon	Oil/Water	3rd Bone Spring	Oil/Water
Brushy Canyon	Oil/Water		
1st Bone Spring	Oil/Water	Possible Fresh Water	250'
8. CASING PROGRAM:

HOLE SIZE	INTERVAL	CASING OD	WEIGHT	THREAD	COLLAR	GRADE	CONDITION
26"	0-40	20"	NA	NA	NA	Conductor	New
<i>see</i> <i>CA</i> 17½"	0-1150 0-1260	13 3/8"	54.5#	8-R	ST&C	J-55	New
12½"	0-5300' 5085	9 5/8"	40#	8-R	LT&C	P-110 J-55	New
<i>see casing page - two segments</i>							
8 3/4"	0-11,750						
7 7/8"	11,750-15,882'						
	10,900-15,882'	5½"	20#	8-R	LT&C	P-110	New
	0-10,900'	5½"	17#	8-R	LT&C	P-110	New

CASING SAFETY FACTORS: Collapse 1.125 Burst 1.00 Body Yield 1.5
 Joint Strength 8-Round 1.8
 Buttress 1.6

9. CASING SETTING DEPTHS & CEMENTING:

20" Conductor Set 40' of 20" Conductor pipe and cement to surface with Redi-mix.

See
COA 13 3/8" Surface Run and set ¹¹⁵⁰~~1260~~' of 13 3/8" 54.5# J-55 ST&C casing. Cement with 623 Sx. of Class "C" cement + 4% Gel, + 2% CaCl, Yield 1.32, tail in with 200 Sx. of Class "C" cement + 2% CaCl, Yield 1.32, circulate cement to surface. 50% Excess.

9 5/8" Intermediate Run and set ⁵⁰⁸⁵~~5300~~' of 9 5/8" casing as follows" ¹¹⁸⁵~~1400~~' of 9 5/8" 40# HCP-110 LT&C, 3900' of 9 5/8" 40# J-55 LT&C CASING. Cement with 1032 Sx. of 35/65 Class "C" POZ cement + 5% Salt, + 6% Gel, Yield 2.09 top of cement surface 50% Excess.
Tail w/ 200 Sx (14.4 lbs, 1.32 f/sk)

5 1/2" Production Run and set 15,882' of 5 1/2" casing as follows: 4982' of 5 1/2" 20# P-110 LT&C, 10,900' of 5 1/2" 17# P-110 LT&C. Cement with 2181 Sx. of 50/50 Class "H" POZ cement + 5# Gilsonite/Sx, + 1/8# cello flakes/Sx. + 1/4% Econolite, Yield 1.3, tail in with 418 Sx. of Class "H" SoluCem cement + fluid loss control, + Defoamer "Acid soluble. Yield 2.61. Top of cement 3800' from surface, 50% Excess.

10. PRESSURE CONTROL EQUIPMENT:

w/ 13 3/8" B.O.P. will be installed

Exhibit "E" shows a 5000 PSI working pressure B.O.P. consisting of a packoff, an annular bag type preventor, blind rams, and pipe rams. This B.O.P. will be nipped up on the 13 3/8" surface casing. The B.O.P. will be tested by a third party testing company to 3000 PSI. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of hole on trips. A full opening stabbing valve and an upper kelly cock will be available on the derrick floor at all time and will be compatible with the drill pipe in use. Exhibit "E-1" shows a 3" 5000 PSI choke manifold with a manual choke and a hydraulic operated remote choke hookup to B.O.P. will be rigid. No abnormal pressures or temperatures are expected while drilling of this well, none recorded in other wells drilled in this area. A 13 5/8" B.O.P. will be installed after the 9 5/8" casing is run and pressure tested to 5000 PSI.

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 UNIT "C" SECTION 29
 T23S-R34E LEA CO. NM

11. PROPOSED MUD CIRCULATING SYSTRM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-1260' 1150	8.6-8.9	29-32	NC	Fresh water spud mud use paper to control seepage, and high vis- cosity to clean hole.
150 1260-5300' 5065	10.0- 10.2	29-36	NC	Brine water using paper to control seepage and high viscosity sweeps to clean hole.
5300-15,882'	8.6-9.2	29-38	NC	Fresh water with the possibility of going to cut brine system, using high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, cut cores and casing, the viscosity, water loss and other properties may have to be altered to meet these requirements. Pit level will be monitored visually and electronic pit level monitor will be used.

THIS WELL WILL BE DRILLED USING A CLOSED MUD SYSTEM.

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T23S-R34E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Laterolog, CNL, LDT, Gamma Ray FMI Sonic, from End of verticle hole (10,900±") back to Intermediate casing (5300').
Run Gamma Ray, Neutron from intermediate casing shoe back to surface.
- B. Rig up mud logger on hole at 500'± and remain on hole to TD.
- C. No DST's or cores are planned at this time unless Geologist requests one to determine quality of reservoir.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP Est. 5350 PSI, and Estimated BHT Est. 195°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 35 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Bone Spring formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialied as a Bone Spring producer.

Well name: **West Copperline 29 Federal Com # 1H_**
 Operator: **Caza Operating, LLC**
 String type: **Surface Casing**

Design parameters:

Collapse

Mud weight: 8.70

Minimum design factors:

Collapse:

ppg DF 1.125

Environment:

H2S considered? No
 Surface temperature: 75.00 °F
 Bottom hole temperature: 83 °F
 Temperature gradient: 0.60 °F/100ft
 Minimum section length: 450 ft
 Minimum Drift: 12.250 in
 Cement top: Surface

Design is based on evacuated pipe.

Burst:

DF 1.12

Burst

Max anticipated surface pressure: 634.25 psi

Internal gradient: 0.12 psi/ft

Calculated BHP 785.45 psi

Annular backup: 4.00 ppg

Tension:

8 Rd STC: 1.80 (J)

8 Rd LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Non-directional string.

Re subsequent strings:

Next setting depth: 5,300 ft
 Next mud weight: 10.000 ppg
 Next setting BHP: 2,753 psi
 Fracture mud wt: 12.000 ppg
 Fracture depth: 1,260 ft
 Injection pressure: 785 psi

Tension is based on buoyed wgt.

Neutral pt: 1,097.90 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)
1	1260	13.375	54.50	J-55	ST&C	1260	1260	12.49

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	569	1130	1.984	634	2730	4.30	59.8	514	8.59 J

Date: May 23, 2013
 Midland, Texas

Richard Wright

Remarks:

Collapse is based on a vertical depth of 1260 ft, a mud weight of 8.7 ppg. The casing is considered to be evacuated for collapse purposes.
 Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:

West Copperline 29 State Com # 1H

Operator: Caza Operating, LLC

String type: Intermediate Casing

Design parameters:

Collapse

Mud weight:

10.00 ppg

DF

1.200

Minimum design factors:

Collapse:

Environment:

H2S considered?

No

Surface temperature:

75.00

°F

Design is based on evacuated pipe.

BHT

107

°F

Temperature gradient:

0.60

°F/100ft

Minimum section length:

450

ft

Minimum Drift:

8.750

in

Cement top:

-0

ft

Burst:

DF

1.12

Burst

Max anticipated surface pressure:

2,667.90 psi

Internal gradient:

0.12 psi/ft

Tension:

Non-directional string.

Calculated BHP

3,303.88 psi

8 Round STC:

1.80 (J)

8 Round LTC:

1.80 (J)

Annular backup:

4.00 ppg

Buttress:

1.60 (J)

Premium:

1.50 (J)

Body yield:

1.60 (B)

Re subsequent strings:

Next setting depth:

11,480

ft

Next mud weight:

9.200

ppg

Next setting BHP:

5,487

psi

Tension is based on buoyed weight.

Neutral pt:

4,511.54 ft

Fracture mud wt:

12.000

ppg

Fracture depth:

5,300

ft

Injection pressure

3,304

psi

Run Seq	Segment Length	Size	Nominal Weight	Grade	End Finish	True Vert Depth	Measured Depth	Drift Diameter
	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)
2	3900	9.625	40.00	J-55	LT&C	3900	3900	8.75
1	1400	9.625	40.00	HCP-110	LT&C	5300	5300	8.75

Run Seq	Collapse Load	Collapse Strength	Collapse Design Factor	Burst Load	Burst Strength	Burst Design Factor	Tension Load	Tension Strength	Tension Design Factor
	(psi)	(psi)		(psi)	(psi)		(kips)	(kips)	
2	2026	2543	1.255	2668	3950	1.48	180.5	520	2.88 J
1	2753	4230	1.536	2326	7900	3.40	24.5	988	40.39 J

Date:

March 27, 2013
Midland, Texas

Wright

Remarks:

Collapse is based on a vertical depth of 5300 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes.

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:
 Operator: **Caza Operating, LLC**
 String type: **Production: Frac**

West Copperline 29 Federal Com # 1H

Design parameters:

Collapse

Mud weight: 10.00 ppg

Internal fluid density: 0.300 ppg

Minimum design factors:

Collapse:

DF 1.200

Burst:

DF 1.20

Environment:

H2S considered? No
 Surface temperature: 75.00 °F
 BHT 150 °F
 Temperature gradient: 0.65 °F/100ft
 Minimum section length: 1,500 ft
 Minimum Drift: 4.625 in
 Cement top: 3,800 ft

Burst

Max anticipated surface pressure: 8,224.16 psi

Internal gradient: 0.14 psi/ft

Calculated BHP 9,802.00 psi

Gas gravity: 0.60

Annular backup: 4.00 ppg

Tension:

8 Rd STC 1.80

8 Rd LTC 1.80

Buttress: 1.60

Premium: 1.50

Body yield: 1.60

Directional well information:

(J) Kick-off point 10900 ft
 (J) Departure at shoe: 4620 ft
 (J) Maximum dogleg: 12 °/100ft
 (J) Inclination at shoe: 88.58 °
 (B)

Tension is based on buoyed weight.

Neutral pt: 9,808.65 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)
2	10900	5.5	17.00	P-110	LT&C	10900	10900	4.767
1	4894	5.5	20.00	P-110	LT&C	11480	15794	4.653

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
2	5492	7480	1.362	8230	10640	1.29	167	445	2.66 J
1	5785	11100	1.919	7457	12630	1.69	-18.3	548	-30.02 J

Date: May 23, 2013
 Midland, Texas

Richard Wright

Remarks:

Collapse is based on a vertical depth of 11480 ft, a mud weight of 10 ppg. An internal gradient of .016 psi/ft was used for collapse from TD to 0. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a tensile load which is added to the axial load.

Engineering responsibility for use of this design will be that of the purchaser.



Copperline 29 State Com #1H “Cement Program” NE/NW_Section 29, T23S, R34E, Lea County, New Mexico.

Below is the well cement requirements for the West Copperline 29 Fed # 1H

1. **Surface hole depth = ~~1260~~ ft. TOC @surface** w/ 50% W/O
Surface hole = 17.5 inch
Surface casing = 13.375" 54.5# J-55 STC
Float Collar 1 jts up.
Hardware needed = 12 spring centralizers_(6) first 6 jts_6 every 5th jt to surface
1 Guide shoe “Tx Pattern”
1 Insert float valve (1 jt Up)
1 thread lock compound
1 collar stop

Engineering Data “Surface”:

~~1260~~ ft 17.5 inch hole x 13.375" csg = .6946 cu ft/ft X 1260 X 1.5 excess = 1313 cu ft

40 ft 13.375" 54.5 # casing volume= .8679 X 40 ft = 35 cu ft

Total Cement volume required = 1348 cu ft.

Lead slurry Coverage (1006-surf) = 1084 cu ft “C” w/ 4% Gel, 2% CaCl₂, 13.5 ppg
yield 1.74 cu ft/sk = **(623 sks)** **Compressive strength documented @ + 500 psi in 12 hrs.**

Tail Slurry Coverage (1260-1006) = 264 cu ft Class “C” w/ 2% CaCl₂ 14.8 ppg yield
1.32 cu ft / sk = **(200 sks)**

2. **Intermediate hole depth = ~~5300~~ ft. TOC @Surface** w/ 50% W/O
Intermediate hole = 12.25 inch
Intermediate Casing = 9.625" 40# J-55 & 40# HCK LTC
Float Collar 1 jts up.
Hardware needed = 12 spring centralizers (6) 1st 6 jts+ 6 space equally to lap
1 Guide Shoe
1 float collar (1 jt up).
1 thread lock compound



Engineering Data "Intermediate":

4500 ft 12.25 inch open hole x 9.625 csg = .3132 cu ft/ft X 4500 X 1.5 excess = 2114 cu ft

800 ft 9.625 x 13.375" casing = .3626 cu ft/ft X 800 = 290 cu ft

40 ft 9.625" 40 # casing volume = .4257 X 40 ft = 17 cu ft

Total Cement volume required = 2421 cu ft.

Lead Coverage (4738-surface) = 2157 cu ft 35:65 poz "C" w/ 5% salt & 6% gel 12.4 ppg yield 2.09 cu ft/sk = **(1032 sks)**

Tail Slurry coverage (5300-4738) = 264 cu ft Class "C" w/ 1% CaCl₂ 14.8 ppg yield 1.32 cu ft / sk = **(200 sks)**

3. **Production Hole depth= 15,880 ft. "11,480" TVD. TOC @ 3800 ft w/ 50% W/O**
Production Hole = 8.75 inch to 11750' "Curve". Note: Stage tool will be considered after reviewing drilling problems.
Lateral = 11750-15,880' MD.

Production Hole Casing = 5-1/2 inch 17# P-110 LTC

Hardware Needed = 24 spring Centralizers
47 Rigid Centralizers for Lateral. (1 every other ft)
Float Collar (1 jt up)
Float Shoe

TOC calculated to 3700 ft w/ 50% Washout open hole

Engineering Data "Production":

1500 ft 9-5/8" 40# X 5-1/2" Csg = 1000' X .2607 cu ft / ft = **391 cu ft.**

6450 ft 8.75 inch open hole x 5-1/2" 17 # casing = 6450' X .2526 x 1.5 excess = **2444 cu ft**

4130 ft 7.875 inch open hole x 5-1/2" 17# casing = 4130' X .1733 x 1.5 excess = **1074 cu ft.**

40 ft 5.5" 17# casing volume = .1305 X 120 ft = **16 cu ft**

Total Cement volume required = 3925 cu ft.

Lead Slurry (11750-3800') = 2835 cu ft 50/50 Poz/"H" mixed @ 14.1 ppg w/yield 1.3 cu ft/sk 5 lb/sk gilsonite + 1/8 lb/sk cello Flake + 1/4% Econolite = **(2181 sks)**

Tail Slurry (15,880-11750') = 1090 cu ft "H" SoluCem mixed 15.0 ppg w/ yield of 2.61 cu ft/sk w/ fluid loss control + Defoamer "Acid soluble" = **418 sks**

Volumes to be adjusted after log review and mud logger log review post drilling

*Verify that
it will
not
exceed
11,750'
with gauge hole*

CAZA OPERATING, LLC.
WEST COPPERLINE 29 STATE COM. #1H
UNIT "C" SECTION 29
T23S-R34E LEA CO. NM

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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

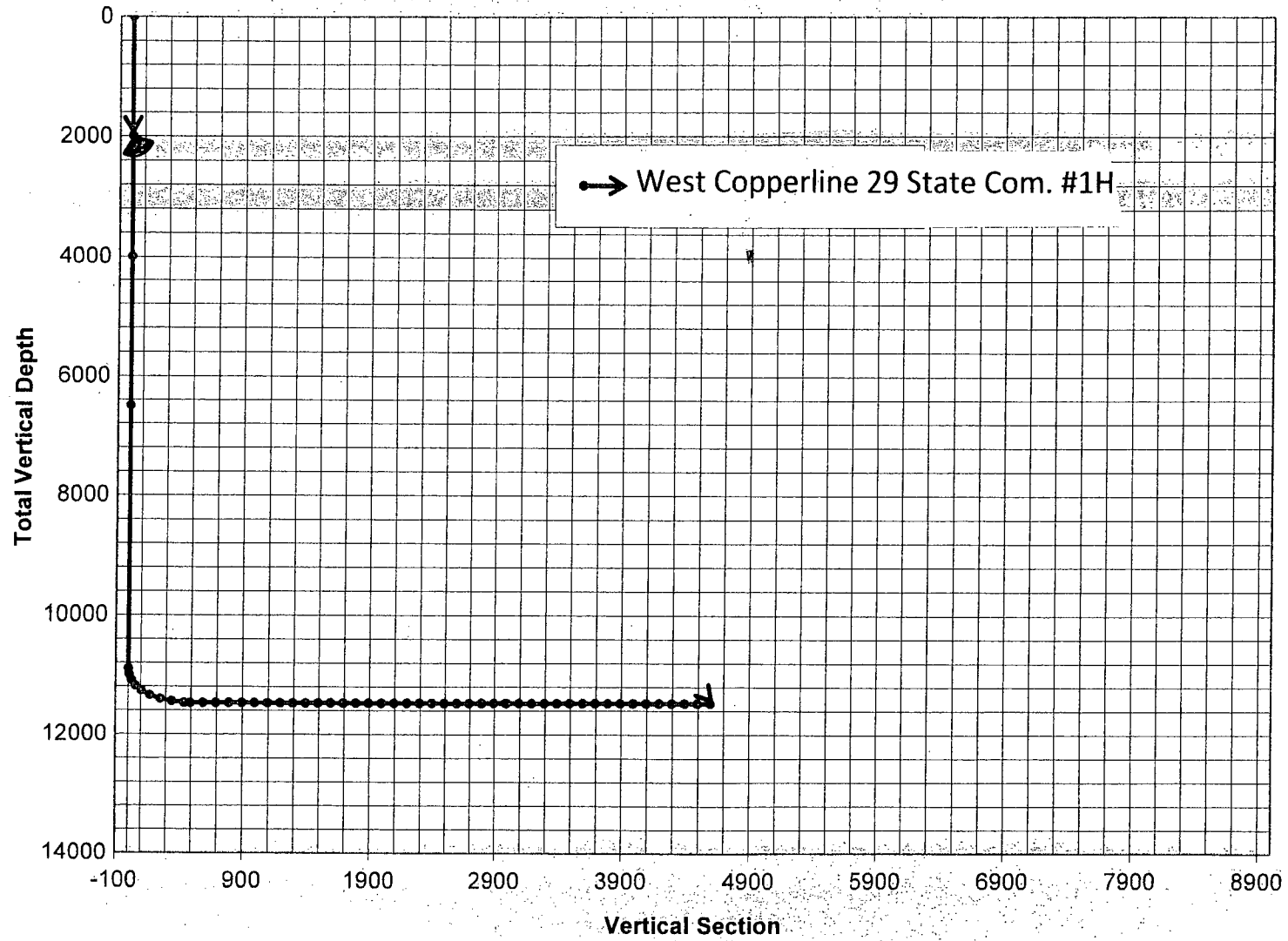
STATION A	STATION B
400.00	600.00
300.00	400.00
100.00	300.00
300.00	ft

TABLE OF SURVEY STATIONS

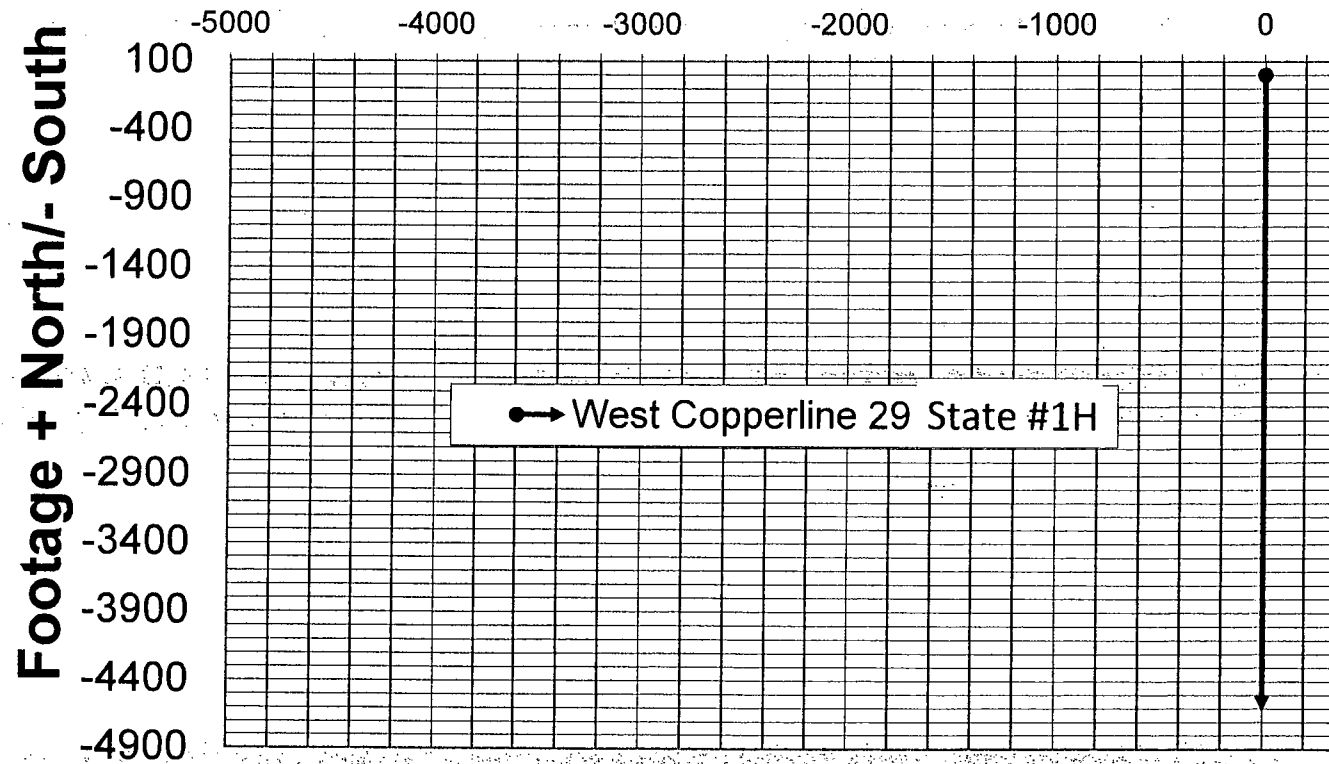
Calculator =

STA #	AMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N+/S- ft	E+/W- ft	DLS deg/100FT
1	TIE POINT =>	0	0	10904.00	10904.00	0.00	0.00	-
2	100	8	180	11004.00	11003.68	-6.97	0.00	8.00
3	100	12	180	11104.00	11102.14	-24.33	0.00	4.00
4	100	24	180	11204.00	11197.07	-55.18	0.00	12.00
5	100	36	180	11304.00	11283.51	-105.09	0.00	12.00
6	100	48	180	11404.00	11357.69	-171.88	0.00	12.00
7	100	60	180	11504.00	11416.36	-252.63	0.00	12.00
8	100	72	180	11604.00	11456.96	-343.82	0.00	12.00
9	100	84	180	11704.00	11477.71	-441.45	0.00	12.00
10	50	90	180	11754.00	11480.33	-491.36	0.00	12.00
11	100	90	180	11854.00	11480.33	-591.36	0.00	0.00
12	100	90	180	11954.00	11480.33	-691.36	0.00	0.00
13	100	90	180	12054.00	11480.33	-791.36	0.00	0.00
14	100	90	180	12154.00	11480.33	-891.36	0.00	0.00
15	100	90	180	12254.00	11480.33	-991.36	0.00	0.00
16	100	90	180	12354.00	11480.33	-1091.36	0.00	0.00
17	100	90	180	12454.00	11480.33	-1191.36	0.00	0.00
18	100	90	180	12554.00	11480.33	-1291.36	0.00	0.00
19	100	90	180	12654.00	11480.33	-1391.36	0.00	0.00
20	100	90	180	12754.00	11480.33	-1491.36	0.00	0.00
21	100	90	180	12854.00	11480.33	-1591.36	0.00	0.00
22	100	90	180	12954.00	11480.33	-1691.36	0.00	0.00
23	100	90	180	13054.00	11480.33	-1791.36	0.00	0.00
24	100	90	180	13154.00	11480.33	-1891.36	0.00	0.00
25	100	90	180	13254.00	11480.33	-1991.36	0.00	0.00
26	100	90	180	13354.00	11480.33	-2091.36	0.00	0.00
27	100	90	180	13454.00	11480.33	-2191.36	0.00	0.00
28	100	90	180	13554.00	11480.33	-2291.36	0.00	0.00
29	100	90	180	13654.00	11480.33	-2391.36	0.00	0.00
30	100	90	180	13754.00	11480.33	-2491.36	0.00	0.00
31	100	90	180	13854.00	11480.33	-2591.36	0.00	0.00
32	100	90	180	13954.00	11480.33	-2691.36	0.00	0.00
33	100	90	180	14054.00	11480.33	-2791.36	0.00	0.00
34	100	90	180	14154.00	11480.33	-2891.36	0.00	0.00
35	100	90	180	14254.00	11480.33	-2991.36	0.00	0.00
36	100	90	180	14354.00	11480.33	-3091.36	0.00	0.00
37	100	90	180	14454.00	11480.33	-3191.36	0.00	0.00
38	100	90	180	14554.00	11480.33	-3291.36	0.00	0.00
39	100	90	180	14654.00	11480.33	-3391.36	0.00	0.00
40	100	90	180	14754.00	11480.33	-3491.36	0.00	0.00
41	100	90	180	14854.00	11480.33	-3591.36	0.00	0.00
42	100	90	180	14954.00	11480.33	-3691.36	0.00	0.00
43	100	90	180	15054.00	11480.33	-3791.36	0.00	0.00
44	100	90	180	15154.00	11480.33	-3891.36	0.00	0.00
45	100	90	180	15254.00	11480.33	-3991.36	0.00	0.00
46	100	90	180	15354.00	11480.33	-4091.36	0.00	0.00
47	100	90	180	15454.00	11480.33	-4191.36	0.00	0.00
48	100	90	180	15554.00	11480.33	-4291.36	0.00	0.00
49	100	90	180	15654.00	11480.33	-4391.36	0.00	0.00
50	100	90	180	15754.00	11480.33	-4491.36	0.00	0.00
51	100	90	180	15854.00	11480.33	-4591.36	0.00	0.00
52	28	90	180	15882.00	11480.33	-4619.36	0.00	0.00

Copperline Prospect

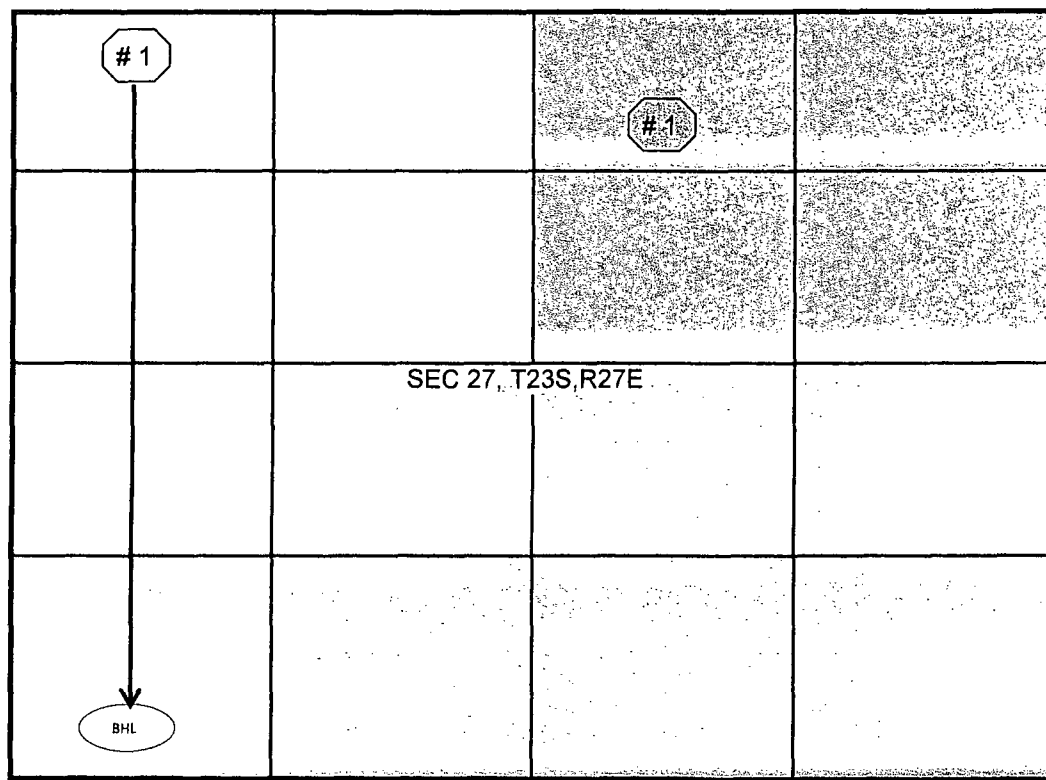


Horizontal Plane Footage +East/-West



West Copperline 29 Fed #1H 3rd Bones Springs Horizontal

Sec 29, T-23-S, R-34-E, Lea County, New Mexico



Well Name	Surface Location	Depth and Strata	Target TD	Bottom Hole Location
W.Copperline 29 Fd # 1H	330 FNL & 1980 FWL	TD = 11,480 3rd Bone Sprgs Hrz	15880 MD	330 FSL & 1980 FWL ± 11,480 T
Antelbellum Unit #2	990 FNL & 1980 FEL	TD= 10860-9532' B Sprgs Vert	14,318 Penn	Same

5000 PSI BOP Schematic

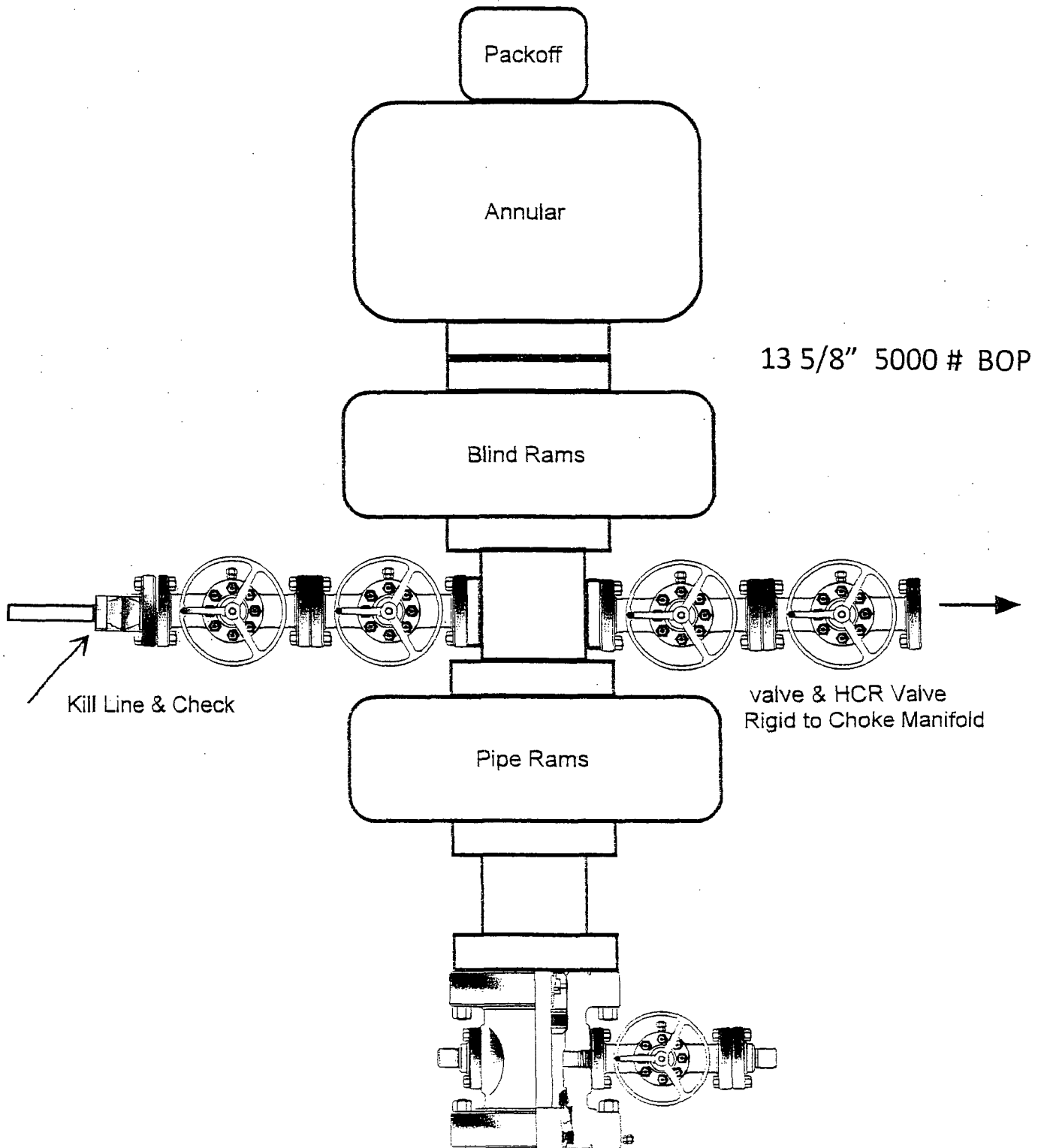
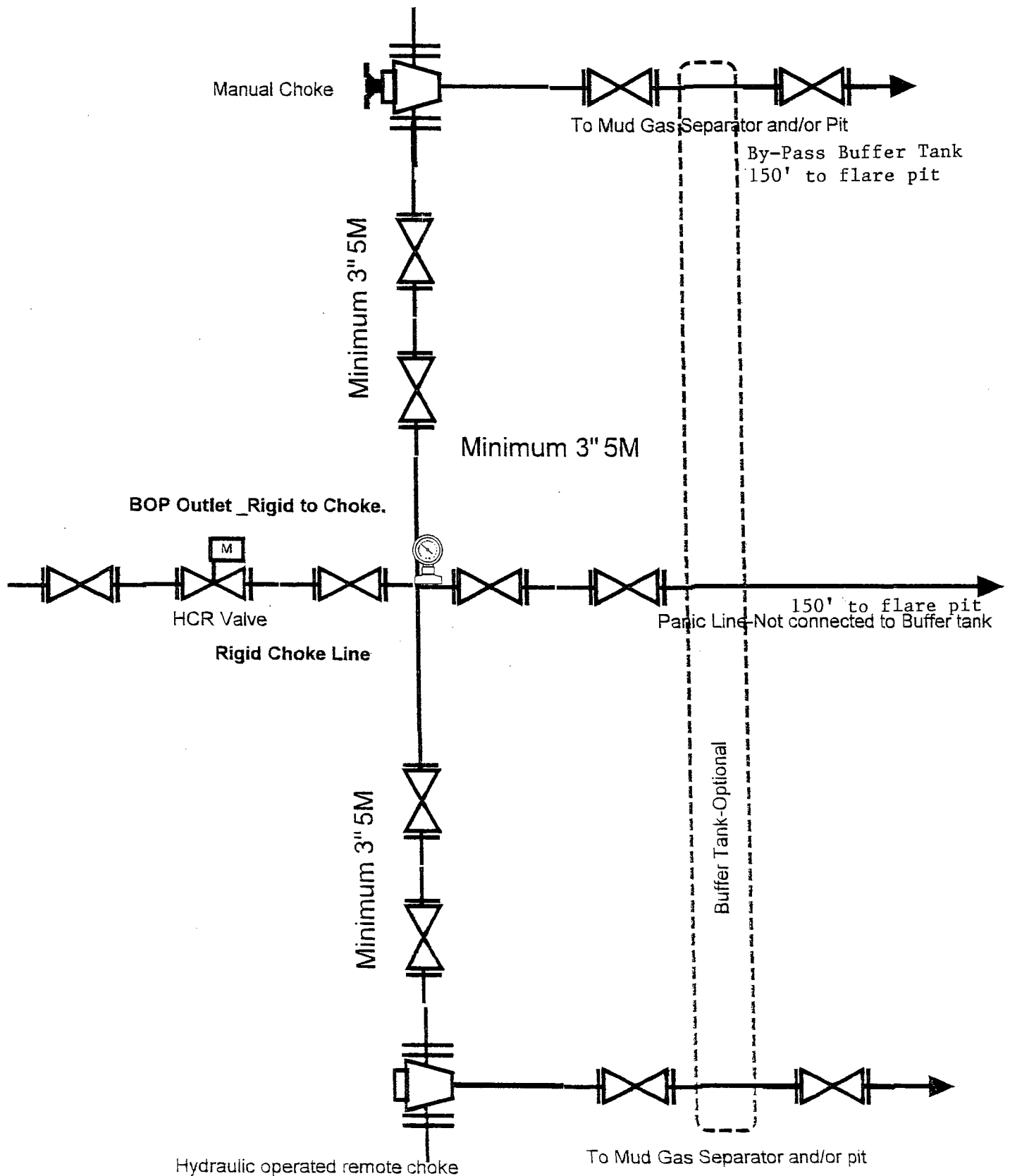
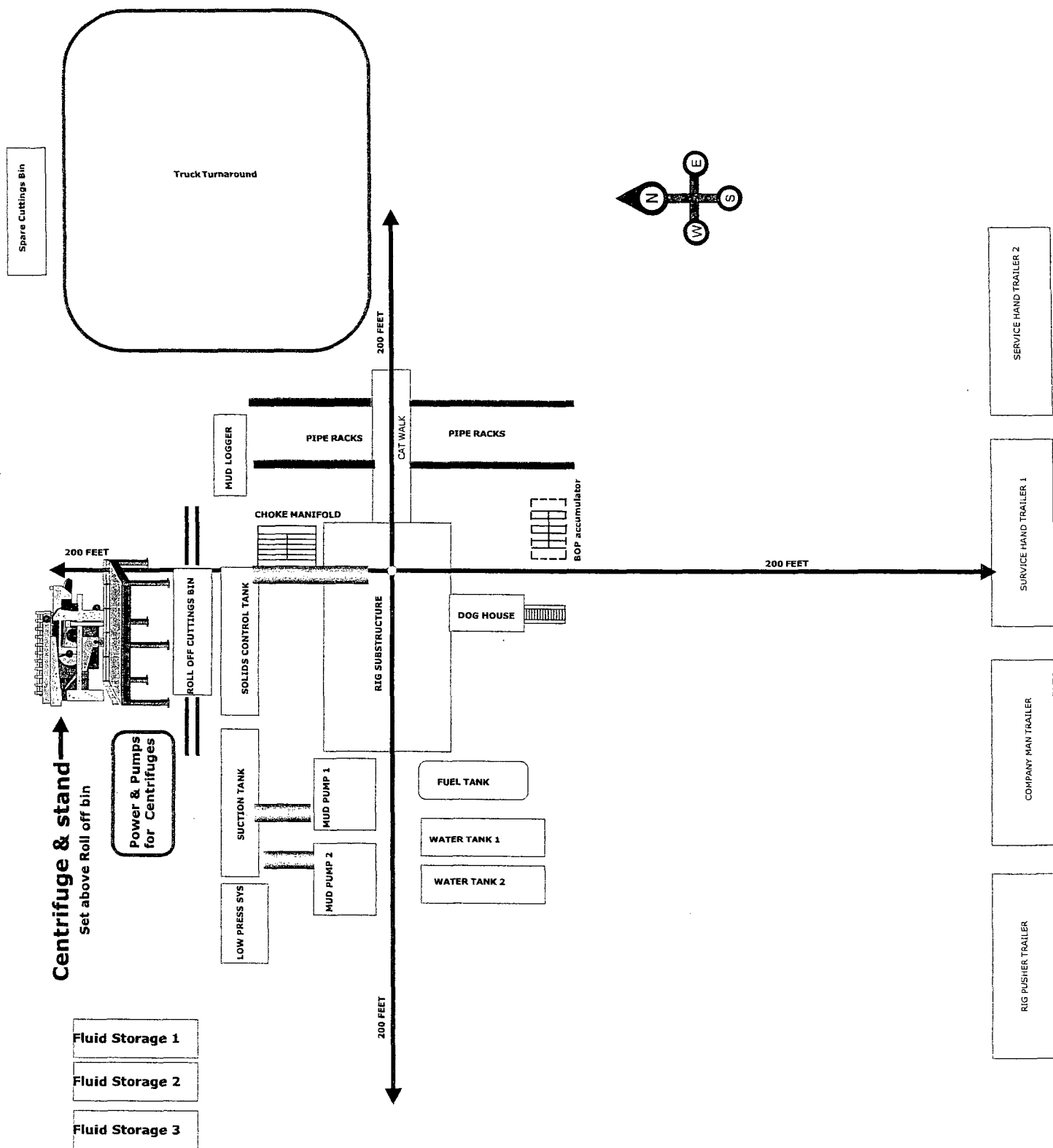


EXHIBIT "E"

5,000 psi Manifold Equipment- Configuration of chokes may vary.



**Closed Loop Oil Well
W. Copperline 29 State Com# 1H**



Note: The Rig and Closed System Company for this well have not been selected thus the set up shown is simply generic.

400'

SECONDARY
EGRESS

Flare Pit & Wall >

Mud Logger

Vent lines may be buried to Flare Pit b4 moving equipment on location > >

150'

Prevailing
Wind
Direction100ft Min
150ft Min if H²S

400'

BRIEFING
AREASECONDARY
EGRESS

400'

Access Road

PRIMARY
BRIEFING AREA

Tool Pusher Housing

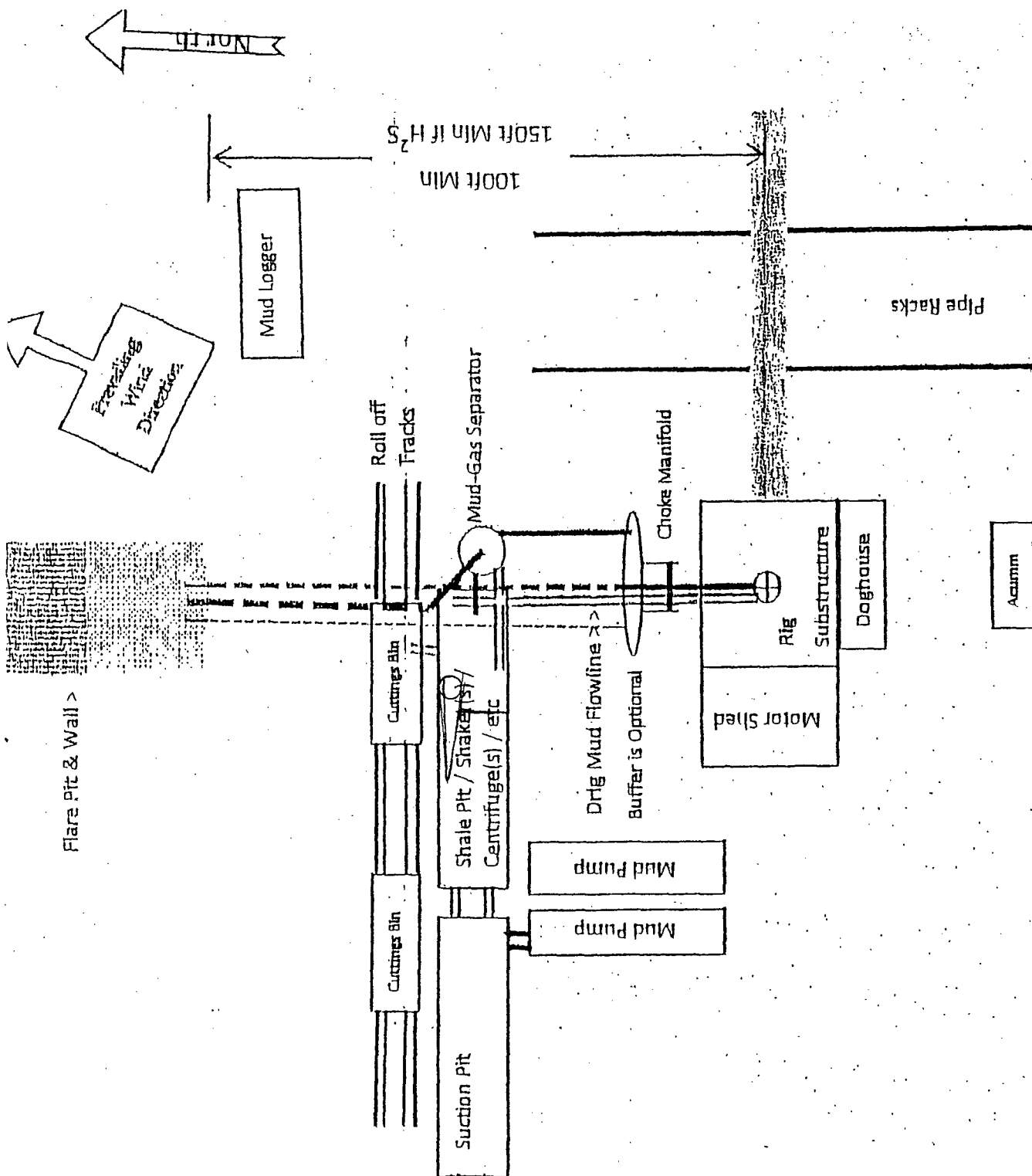
Company Man Housing

Generic Drill Site
Layout

Preplanning reasonable spacing accommodations for a useable "Closed Loop" drillsite layout is challenging. Particular site specific conflicts need to be resolved. This generic APD plat was prepared to demonstrate several necessary elements. The plat should include: a north arrow, prevailing wind direction, spacing access for truck removal of cutting bins, flare pit location, and piping provision to vent all combustible gas to the flare pit. Include the choke manifold and mud-gas separator location and their connection routing.

EXHIBIT "D"
RIG LAYOUT PLAT

CAZA OPERATING, LLC.
WEST COPPERLINE "29" STATE COM, #1H
UNIT "C" SECTION 29
T23S-R34E LEA CO. NM



EXPANDED VIEW OF
FLOWLINES TO MUD-GAS
SEPARATOR & BLOW DOWN
LINES TO FLARE PIT

**Caza Operating, LLC
West Copperline 29 State Com # 1H
Hydrogen Sulfide Contingency Plan
For Drilling/Workover/Facility**

330 FNL & 1980 FWL, SEC 29, 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. There are no occupied dwellings in the area but a contingency plan has been orchestrated. Caza Operating, LLC will have a Company Representative living on location through out the drilling and completion of this well. If Hydrogen Sulfide is detected or suspected, monitoring equipment will be available for monitoring and/or testing. An un-man H₂S safety trailer and monitoring equipment will also be station on location during the drilling operation below the Surface Casing depth of \pm 800 ft. to total drilling depth of 15,880 ft.

**Caza Operating, LLC
West Copperline 29 State Com # 1H
Hydrogen Sulfide Contingency Plan
For Drilling/Workover/Facility**

330 FNL & 1980 FWL, SEC 29, T23S, R34E, LEA COUNTY, NEW MEXICO

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 e 1006	432 556 7595	432 699 7108
Tony Sam	432 682-7424 e 1007	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 (Ambulance)	Eddy County		911 or 575 746 2701
	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
West Copperline 29 State Com # 1H
Hydrogen Sulfide Contingency Plan
For Drilling/Workover/Facility**

330 FNL & 1980 FWL, SEC 29, T23S, R34E, LEA COUNTY, NEW MEXICO

Jal ambulance		575 395 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		575 234 5972
BLM Hobbs		575 393 3612
Lea County Information		575 393 8203
Midland Safety	Lea/Eddy County	432 520 3838 888 262 4964
American Safety	Lea/Eddy County	575 746 1096 575 393 3093
Baker Pressure pmp'g	Artesia	575 746 3140
	Hobbs	800 530 4485 575 392 5556
	Midland	800 694 6601 432 685 8900
Halliburton	Artesia	800 844 8451
	Hobbs	800 844 8451
	Midland	800 844 8451
Schlumberger pmp'd Ser	Hobbs	800 548 9196 575 393 6186
	Artersia	575 748 1391
	Midland	432 683 1887
Wild Well Control	Midland	281 784 4700 281 443 4873
Boots & Coots		800 256 9688 281 931 8884

**Caza Operating, LLC
West Copperline 29 State Com # 1H
Hydrogen Sulfide Contingency Plan
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330 FNL & 1980 FWL, SEC 29, T23S, R34E, LEA COUNTY, NEW MEXICO

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