Form 3160-3
(March 2012)

OCD Artesia TEG 9-23-14

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

14-684

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM120893(SWSE),NMNM118713 -- West of Section

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

8. Lease Name and Well No. Rustler Bluff 33 24 29 Fed Com #1H <313717>

2. Name of Operator CHEVRON U.S.A. INC. <4323>

9. API Well No. 30-015-42670

3a. Address 15 SMITH ROAD MIDLAND, TEXAS 79705

3b. Phone No. (include area code) 432-687-7375

10. Field and Pool or Exploratory ~~PIERCE CROSSING;BONE SPRING,E~~ WILDCAT; BS, SE <96217>

4. Location of Well (Report location clearly and in accordance with any State requirements.*)

At surface 225' FNL, & 1980' FEL

At proposed prod. zone 330' FNL, & 1980' FEL

11. Sec., T. R. M., or Blk. and Survey or Area SEC 4, T-25S, R29E, UL:B (SHL) LOT 2
SEC 33 T24S, R29E, UL: B (BHL)

14. Distance in miles and direction from nearest town or post office* 1.3 MILES FROM MALAGA, NEW MEXICO

12. County or Parish EDDY

13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 225' FNL OF SEC 4

16. No. of acres in lease 640

17. Spacing Unit dedicated to this well 160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2650' TO OXY CEDAR CANYON 28 #4

19. Proposed Depth PILOT HOLE = 9,000'
TVD: 13,677'
MD: 8685'

20. BLM/BIA Bond No. on file CA0329

21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2934' GL

22. Approximate date work will start*

23. Estimated duration

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	Name (Printed/Typed)	Date
Denise Pinkerton	DENISE PINKERTON	04/03/2014

Title: REGULATORY SPECIALIST

Denise Pinkerton 05/20/14

Approved by (Signature)	Name (Printed/Typed)	Date
Steve Caffey		SEP 17 2014

Title	Office
FIELD MANAGER	CARLSBAD FIELD OFFICE

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.

(Continued on page 2)

*(Instructions on page 2)

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 22 2014
RECEIVED

Carlsbad Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Executed this 28 day of March, 20 14

Name: K Wojtasek
Kelly Wojtasek - Project Manager

Address: 1400 Smith Street, 40039
Houston, TX 77027

Office 713-372-9691

E-mail: kellyanne@chevron.com

Exhibit A-1

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☑ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-42670	~~96423~~ 96217	~~Pierce Crossing; Bone Spring, East~~ Willow Lake; B.S., NW, 7-22 SE
[4] Property Code	[5] Property Name	[6] Well Number
313721	RUSTLER BLUFF 33 24 29 FED COM	1H
[7] OGRID No.	[8] Operator Name	[9] Elevation
4323	CHEVRON U.S.A. INC.	2934'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	4	25 SOUTH	29 EAST, N.M.P.M.	2	225'	NORTH	1980'	EAST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	33	24 SOUTH	29 EAST, N.M.P.M.		330'	NORTH	1980'	EAST	EDDY

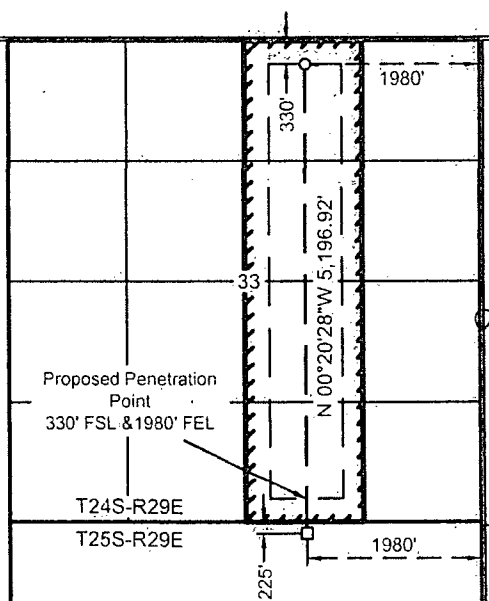
[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
160			

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.

[16]

PROPOSED BOTTOM HOLE LOCATION		
X=	607,192	NAD 27
Y=	429,395	
LAT.	32.180048	
LONG.	103.986870	
X=	648,376	NAD83
Y=	429,453	
LAT.	32.180172	
LONG.	103.987357	

RUSTLER BLUFF 33 24 29 FED COM NO.1H WELL		
X=	607,223	NAD 27
Y=	424,198	
LAT.	32.165762	
LONG.	103.986824	
X=	648,407	NAD83
Y=	424,256	
LAT.	32.165886	
LONG.	103.987311	
ELEVATION +2934' NAVD 88		



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. 5/20/14

Denise Pinkerton 4/3/14
Signature Date

Denise Pinkerton
Printed Name

leakejd@chevron.com
E-mail Address

[18] SURVEYOR CERTIFICATION

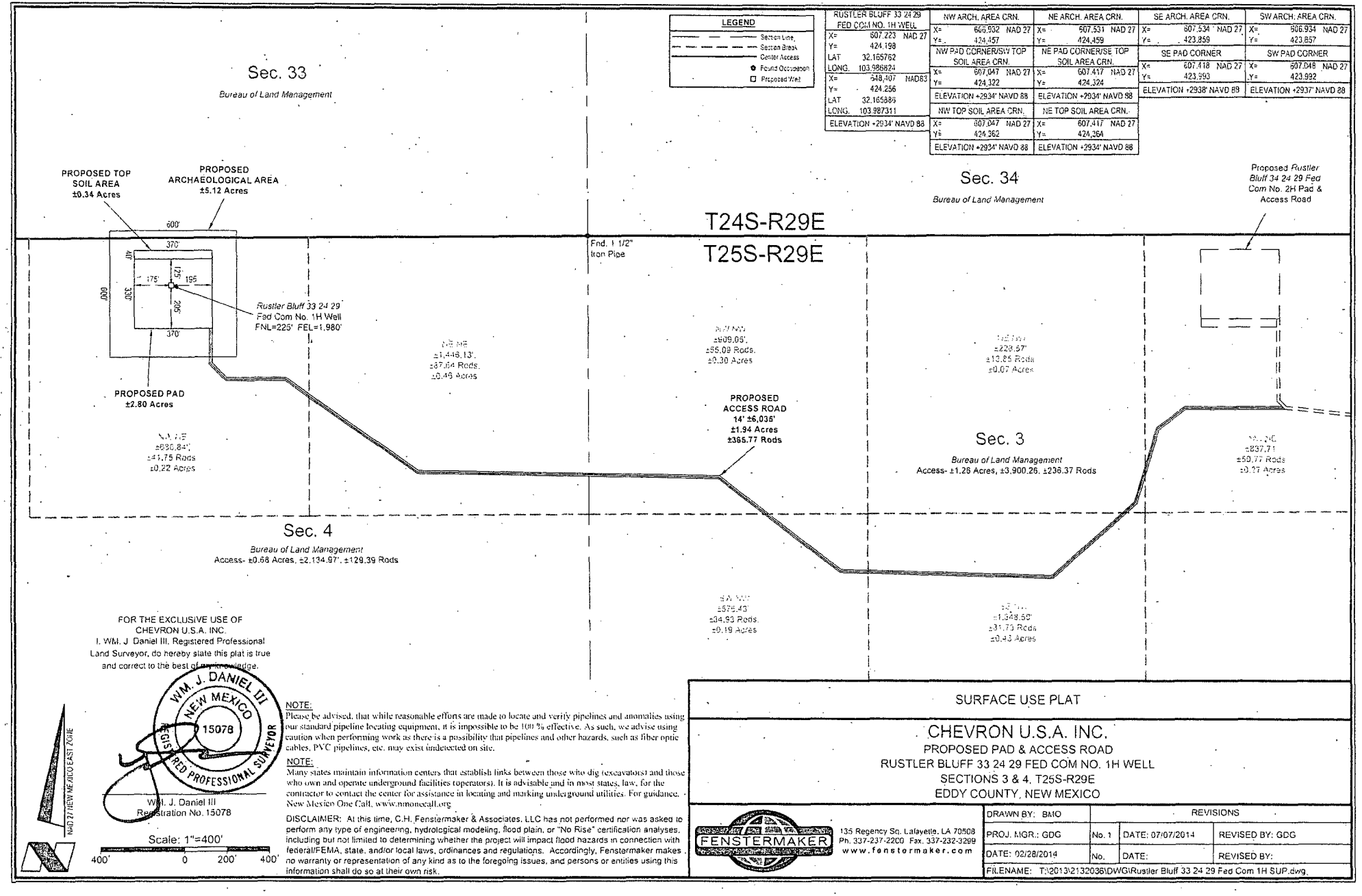
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Mar 7 2014
Date of Survey

Signature and Seal of Professional Surveyor

NEW MEXICO 15078 REGISTERED PROFESSIONAL SURVEYOR
W.M. J. DANIEL III

Certificate Number #15078



FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.
I, WM. J. Daniel III, Registered Professional Land Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

WM. J. DANIEL III NEW MEXICO 15078 REGISTERED PROFESSIONAL SURVEYOR

Wm. J. Daniel III
Registration No. 15078

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

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

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

SURFACE USE PLAT

CHEVRON U.S.A. INC.

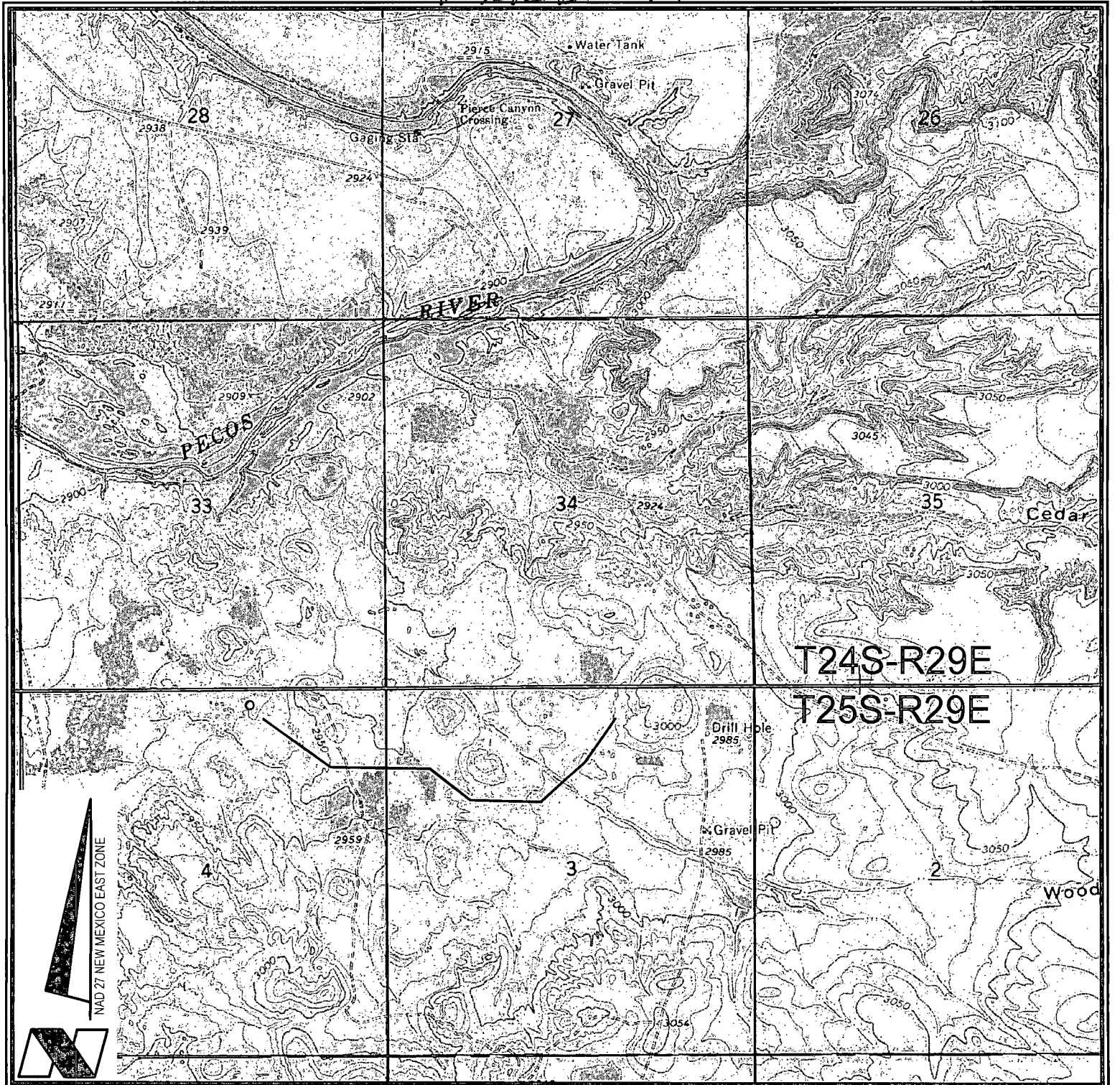
PROPOSED PAD & ACCESS ROAD
RUSTLER BLUFF 33 24 29 FED COM NO. 1H WELL
SECTIONS 3 & 4, T25S-R29E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

DRAWN BY: BMO	REVISIONS		
PROJ. MGR.: GDG	No. 1	DATE: 07/07/2014	REVISED BY: GDG
DATE: 02/28/2014	No.	DATE:	REVISED BY:

FILENAME: T:\2013\2132036\DWG\Rustler Bluff 33 24 29 Fed Com 1H SUP.dwg

Exhibit A-3



VICINITY MAP

2,000' 0 1,000' 2,000'

Scale: 1" = 2,000'

CHEVRON U.S.A. INC.

LOCATED 225' FNL AND 1,980' FEL

RUSTLER BLUFF 33 24 29 FED COM NO. 1H WELL

SECTIONS 3 & 4, T25S-R29E

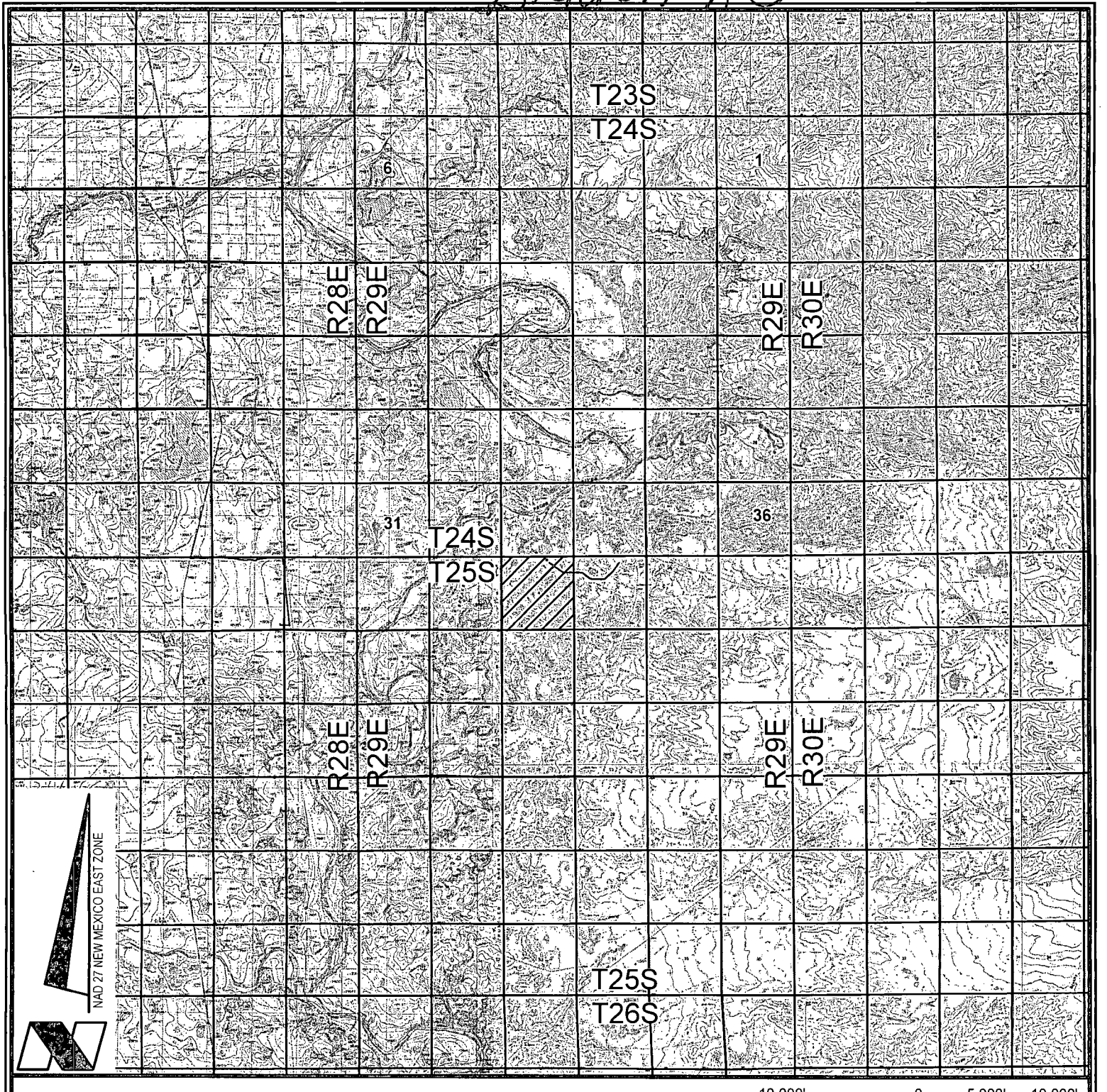
EDDY COUNTY, NEW MEXICO

FENSTERMAKER

Lafayette New Orleans Houston
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

DRAWN BY: BMO	REVISED:	DATE: 02/28/2014
PROJ. MGR.: GDG		SHEET 1 OF 3 SHEETS
FILENAME: T:\2013\2132036\DWG\Rustler Bluff 33 24 29 Fed Com 1H APD.dwg		

Exhibit A-3



VICINITY MAP

10,000' 0 5,000' 10,000'

Scale: 1" = 10,000'

CHEVRON U.S.A. INC.

LOCATED 225' FNL AND 1,980' FEL

RUSTLER BLUFF 33 24 29 FED COM NO. 1H WELL

SECTIONS 3 & 4, T25S-R29E

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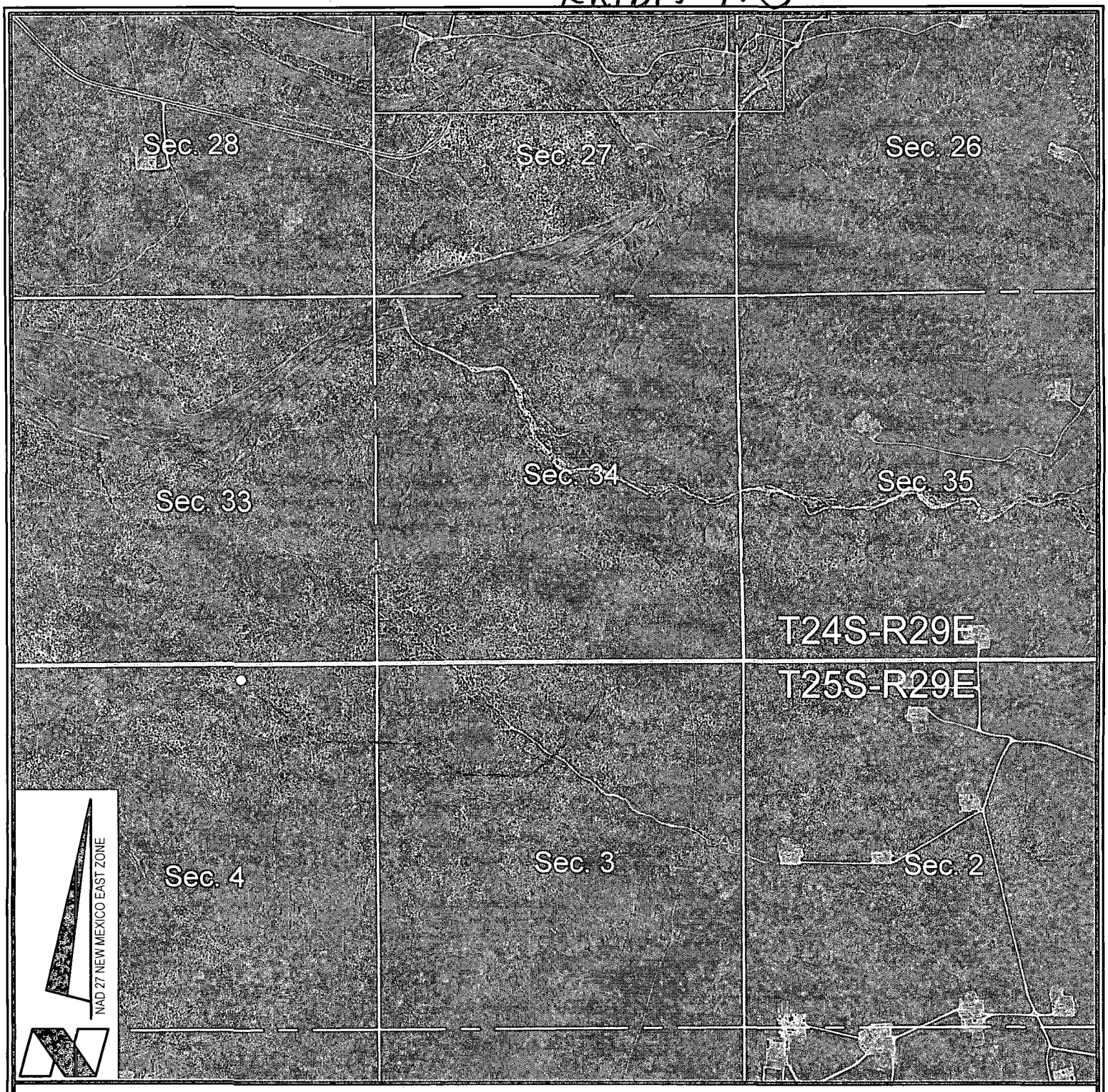
www.fenstermaker.com

DRAWN BY: BMO	REVISED:	DATE: 02/28/2014
PROJ. MGR.: GDG		SHEET 2 OF 3 SHEETS
FILENAME: T:\2013\2132036\DWG\Rustler Bluff 33 24 29 Fed Com 1H APD.dwg		

Exhibit A-3



VICINITY MAP

2,000' 0 1,000' 2,000'

Scale: 1" = 2,000'

= FEDERAL LAND

= FEE LAND

= STATE LAND

CHEVRON U.S.A. INC.

LOCATED 225' FNL AND 1,980' FEL

RUSTLER BLUFF 33 24 29 FED COM NO. 1H WELL

SECTIONS 3 & 4, T25S-R29E

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DRAWN BY: BMO	REVISED:	DATE: 02/28/2014
PROJ. MGR.: GDG		SHEET 3 OF 3 SHEETS
FILENAME: T:\2013\2132036\DWG\Rustler Bluff 33 24 29 Fed Com 1H APD.dwg		

Exhibit B

33-24-29 1 mile radii around surface and bottom-hole locations for Chevron Rustler Bluff 33-24-29 1H

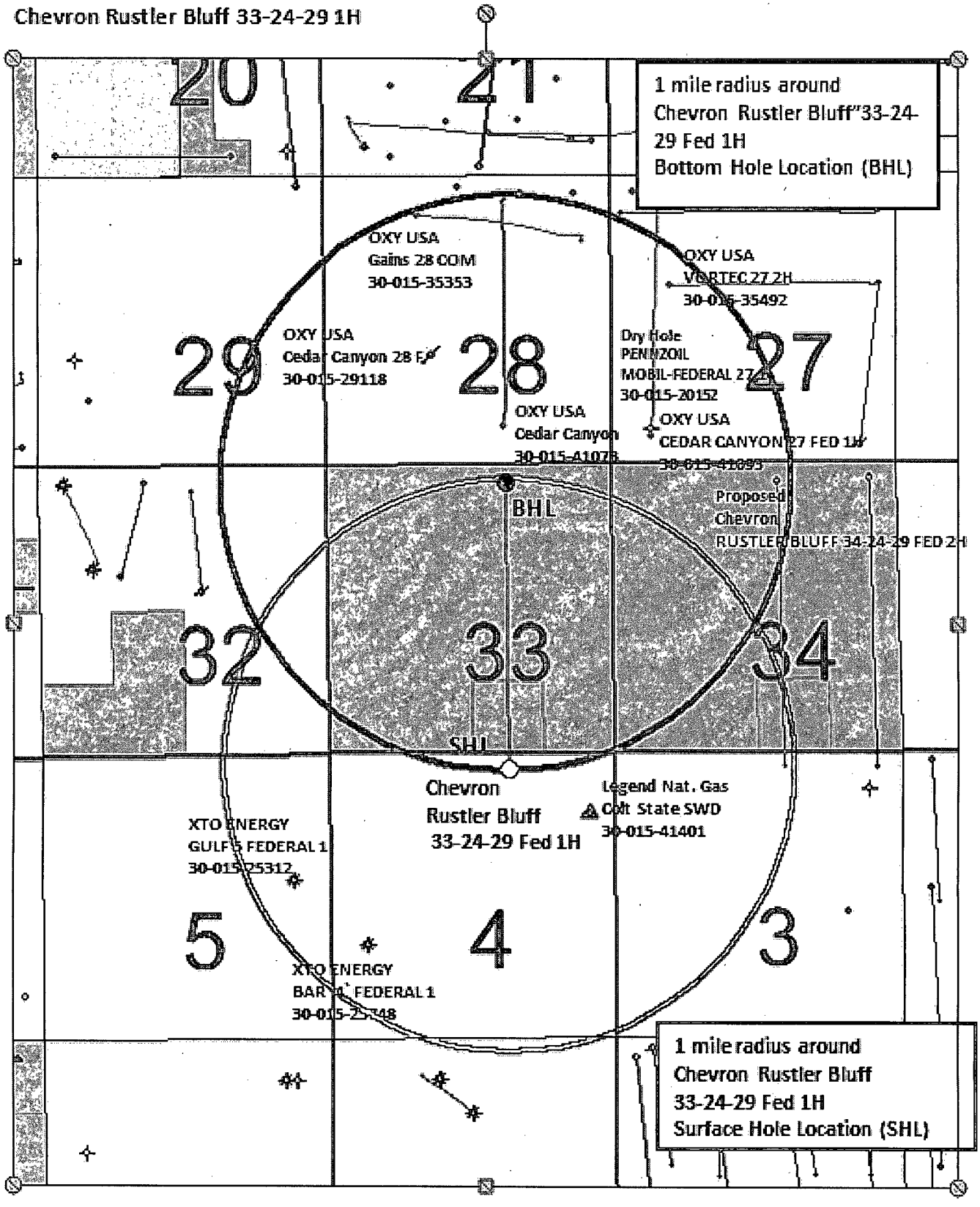
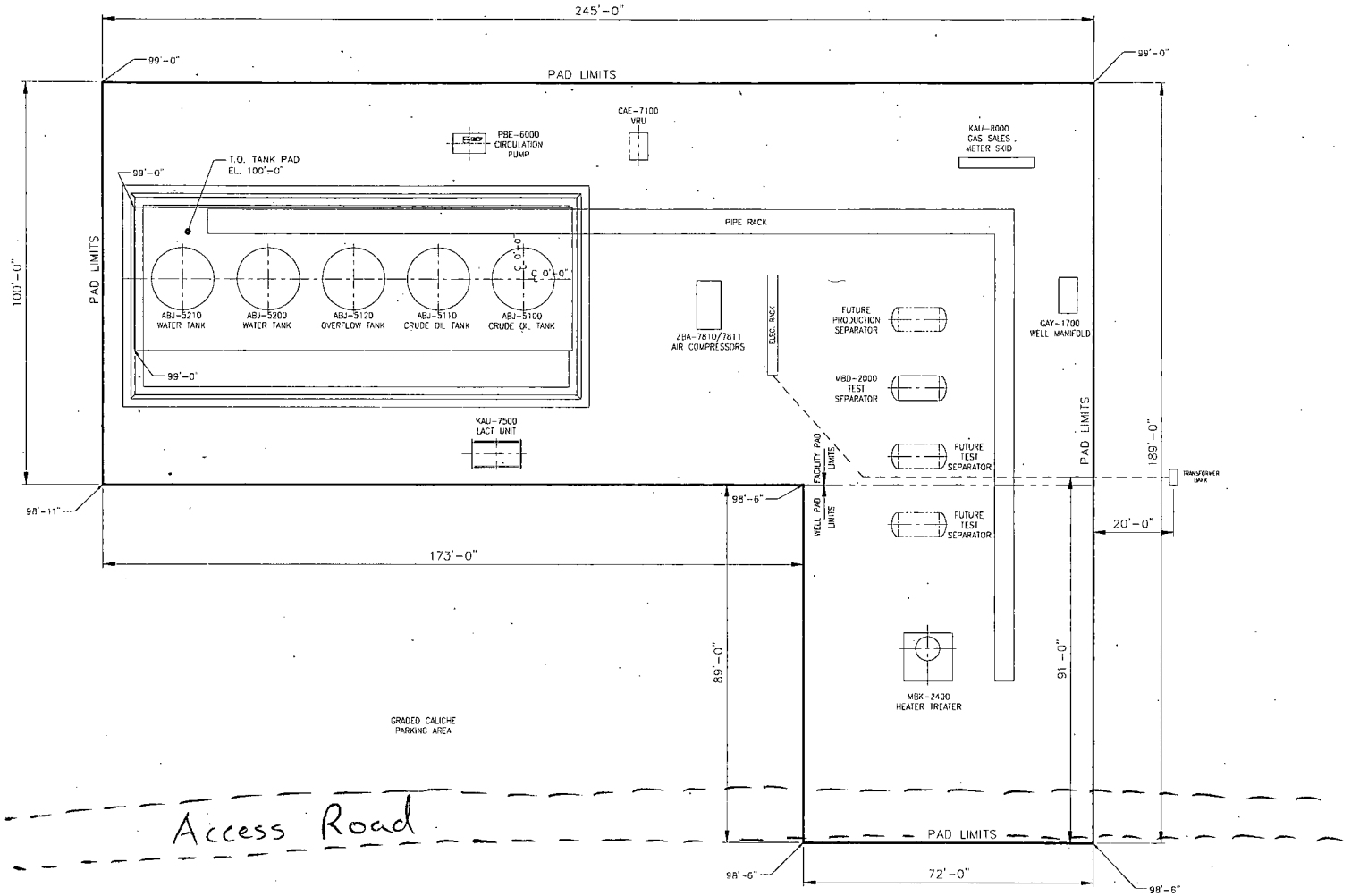


Exhibit C



REVISIONS					
A ISSUED FOR APPROVAL J VUELVAS 4/8/14 VCO					

ISSUED FOR APPROVAL

Chevron U.S.A. Inc.

HOBBS FMT–DELAWARE BASIN
PRODIGAL SUN MTB–LEA COUNTY, NEW MEXICO

PLOT PLAN

API _____ LEASE _____

ALRDG-PRODSUNMTB-CIV-PLT-MCB-2000-01 A

DURING THE DRILLING OF THIS WELL, CHEVRON PROPOSES TO USE A CLOSED LOOP SYSTEM WITH A STEEL TANK AND HAUL TO THE REQUIRED DISPOSAL, PER THE OCD RULE 19.15.17.

PLEASE FIND THE FOLLOWING ATTACHMENTS:

C-102 (EXHIBIT A-1)

VICINITY MAPS (EXHIBIT A-2 through A-3)

MILE RADIUS MAP (EXHIBIT B)

DRILLING PLAN

DIRECTIONAL PLAN & PLOT

BOP SCHEMATIC

CHOKE MANIFOLD SCHEMATIC

BOPE TESTING

RIG LAYOUT/FACILITY PAD (EXHIBIT D)

SURFACE USE PLAN

OPERATOR CERTIFICATION – SIGNED

OIL & GAS MEASUREMENT SCHEMATIC (EXHIBIT C)

H2S PLAN

MISCELLANEOUS MAPS (PROPOSED PAD & ACCESS ROAD,EXISTING & PROPOSED ROW EASEMENT DETAIL, PROPOSED FLOWLINE

COFLEX HOSE TEST CERTIFICATION & CHART

WELLHEAD SCHEMATIC

PRESSURE CONTROL WELLHEAD EQPT RUNNING PROCEDURE Not Required

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA	KBTVD	MD
Rustler	2617	348	
Salado	2117	848	
Castile	1416	1549	
Lamar	15	2950	
Bell Canyon	-25	2990	
Cherry Canyon	-728	3693	
Brushy Canyon	-2163	5128	
Bone Spring Limestone	-3745	6710	
1st Bone Spring	-4673	7638	
2nd Bone Spring	-5484	8449	
Lateral TD (2nd Bone Spring)	(5,721)	8,686	13678

2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Deepest Expected Base of Fresh Water		350
Water	Rustler	348
Water	Bell Canyon	2990
Oil/Gas	Cherry Canyon	3693
Oil/Gas	Brushy Canyon	5128
Oil/Gas	Bone Spring Limestone	6710
Oil/Gas	1st Bone Spring	7638
Oil/Gas	2nd Bone Spring	8449

All shows of fresh water and minerals will be reported and protected.

3. BOP EQUIPMENT

Will have a minimum of a 5000 psi rig stack (see proposed schematic) for drill out below surface casing. Stack will be tested as specified in the attached testing requirements. Chevron requests a variance to use A coflex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. Please see the attached testing and certification information.

Chevron requests a variance to use a GE/Vetco SH-2 Multibowl wellhead, which will be run through the rig foor on surface casing. BOPE will be nippled up and test after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from GE/Vetco and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal.

4. **CASING PROGRAM** 5

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	500'	17-1/2"	13-3/8"	48 #	H-40	STC	New
See COA Intermediate	0'	~~2700~~ 2,975'	12-1/4"	9-5/8"	40 #	HCK-55	LTC	New
Production	0'	13,678'	8-3/4"	5-1/2"	17.0 #	HCP-110	CDC	New

b. Casing design subject to revision based on geologic conditions encountered.

c. ***A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalcuated & sent to the BLM prior to drilling.**

d. **Chevron will fill casing at a minimum of every 20 jts (840') while running for intermediate and production casing in order to maintain collapse SF.**

SF Calculations based on the following "Worst Case" casing design.

Surface Casing: 1500'
Intermediate Casing: 5300'
Production Casing: 16,500' MD/11,500' TVD (5000' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension
Surface	1.28	1.14	1.6
Shallow Intermediate	1.28	1.25	1.6
Production	1.34	1.65	1.6

Min SF is the smallest of a group of safety factors that include the following considerations:

	Surf	Int	Prod
Burst Design			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 15 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
Collapse Design			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
Tension Design			
100k lb overpull	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk
Tail	Class C+2%CaCl	0'	500'	14.8	1.36	125	587	6.39
Intermediate								
Lead	Class C+4%Gel +1%CaCl	0'	2,375'	13.7	1.68	100	811	9.72
Tail	Class C+1%CaCl	2,375'	2,975'	14.8	1.33	100	311	6.24
Production								
1st Lead	50% Class H+ 50% Silicalite +2% Gel	2,475'	7,909'	11.3	2.54	100	1033	15.07
2nd Lead	50% Class H+ 50% Silicalite +2% Gel	7,909'	12,645'	12.5	1.81	35	896	8.10
Tail	Acid Soluble Cement	12,645'	13,678'	15	2.6	0	100	11.2

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one horizontal type centralizer on every joint for the first 1000' from TD, then every other joint to EOB, and then every third joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing.

Pilot Hole Plugging Plan:
Please note that this 8-3/4" Pilot Hole will TD at 9000' within the Second Bone Springs Shale formation, and the planned lateral will be in the Second Bones Spring Sand formation.

An open hole cemented whipstock will be utilized with 2-7/8" tail pipe. The tail 2-7/8" tail pipe will be cemented in place from the Pilot hole TD of 9,000' MD/TVD to 50' above whipstock/KOP at 8,159' MD/TVD (KOP is currentlly planned at 8,209' but is subject to change after evaluating Pilot Hole logs.)

Plug	Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water
					(ppg)	(sx/cu ft)	Open Hole		gal/sk
1st Pilot Hole Plug	Plug Cement	Class H	8,159'	9,000'	17.2	0.97	35	460	2.63

6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate	
0'	500' 2900	Spud Mud	8.3 - 8.7	32 - 34	NC - NC	
500'	~~2,975'~~	Brine	9.5 - 10.1	28 - 29	NC - NC	
~~2,975'~~	8,209'	FW/Cut Brine	8.3 - 9.5	28 - 29	NC - NC	
8,209'	9,000'	Cut Brine	8.3 - 9.5	28 - 29	NC - NC	Pilot Hole
8,209'	8,959'	Cut Brine	8.3 - 9.5	28 - 30	15 - 25	Curve
8,959'	13,678'	FW/Cut Brine	8.3 - 9.5	28 - 29	15 - 25	

A closed system will by utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

7. TESTING, LOGGING, AND CORING

The anticipated type and amount of testing, logging, and coring are as follows:

a. Drill stem tests are not planned.
b. The logging program will be as follows:

TYPE	Logs	Interval	Timing	Vendor
Mudlogs	2 man mudlog	Int Csg to TD	Drillout of Int Csg	TBD
LWD	MWD Gamma	Curve and Lateral	While Drilling	TBD
OH Wireline	Triple combo	Surface to pilot TD	TD of pilot hole	TBD
-	-	-	-	-
-	-	-	-	-

c. Conventional whole core samples are not planned.
d. A Directional Survey will be run.

8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

a. No abnormal pressures or temperatures are expected. Estimated BHP is: 4025 psi
b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

Chevron USA, Inc.

Project: Eddy County, NM
Site: Rustler Bluff 33 24 29 Fed
Well: Rustler Bluff 33 24 29 Fed 1H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: Ensign 767

SURFACE LOCATION

US State Plane 1927 (Exact solution)
New Mexico East 3001
Elevation: GL 2934.0' + KB 25.0' @ 2959.00usft (Ensign 767)

Northing	Easting	Latitude	Longitude
424198.00	607223.00	32° 9' 56.746 N	103° 59' 12.562 W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Rustler Bluff 33 24 29 Fed 1H BHL	8685.00	5197.00	-31.00	429395.00	607192.00	32° 10' 48.178 N	103° 59' 12.728 W

TARGET INFORMATION:

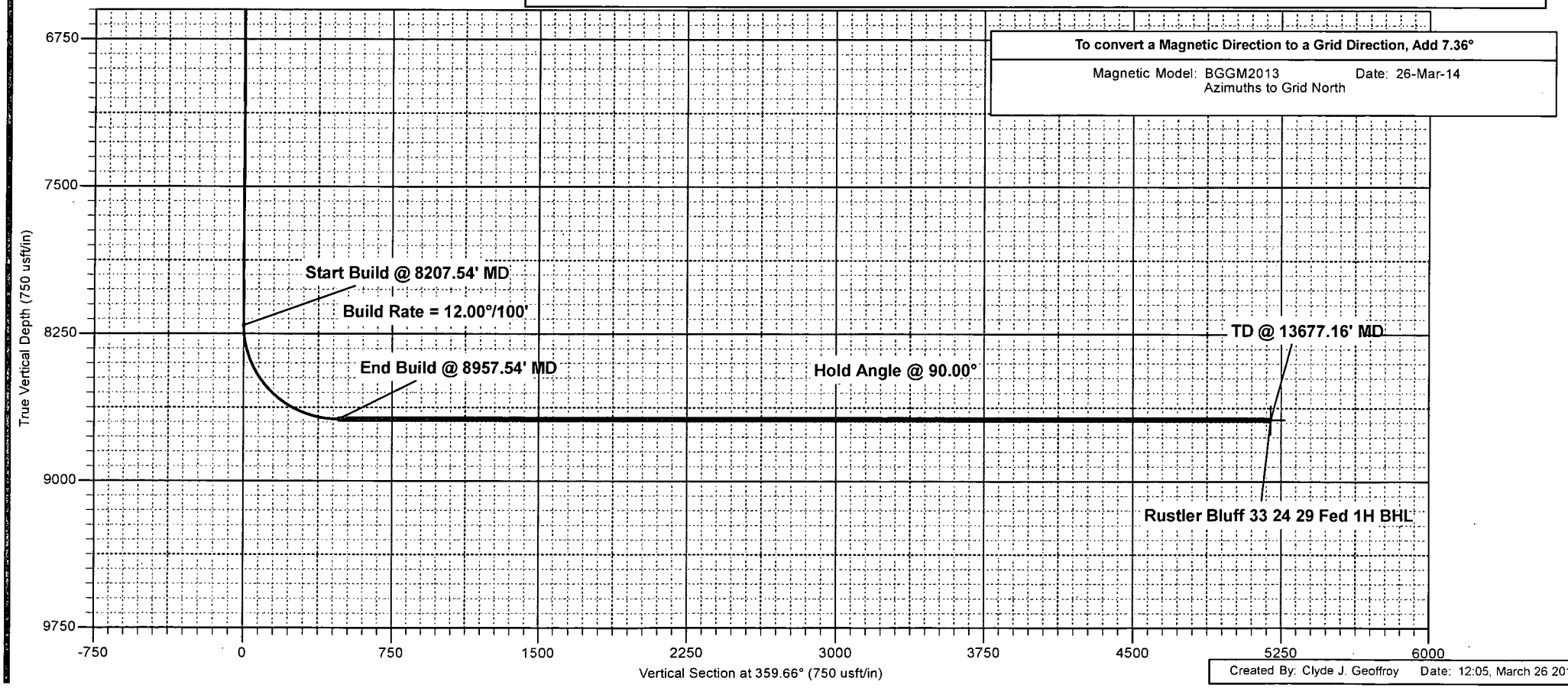
8685.0' TVD @ 0.0' VS w/0.00° Dip
10' Up & 10' Down
50' Left & 50' Right

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8207.54	0.00	0.00	8207.54	0.00	0.00	0.00	0.00	0.00	Start Build
8957.54	90.00	359.66	8685.00	477.46	-2.85	12.00	359.66	477.46	End Build
13677.16	90.00	359.66	8685.00	5197.00	-31.00	0.00	0.00	5197.09	TD

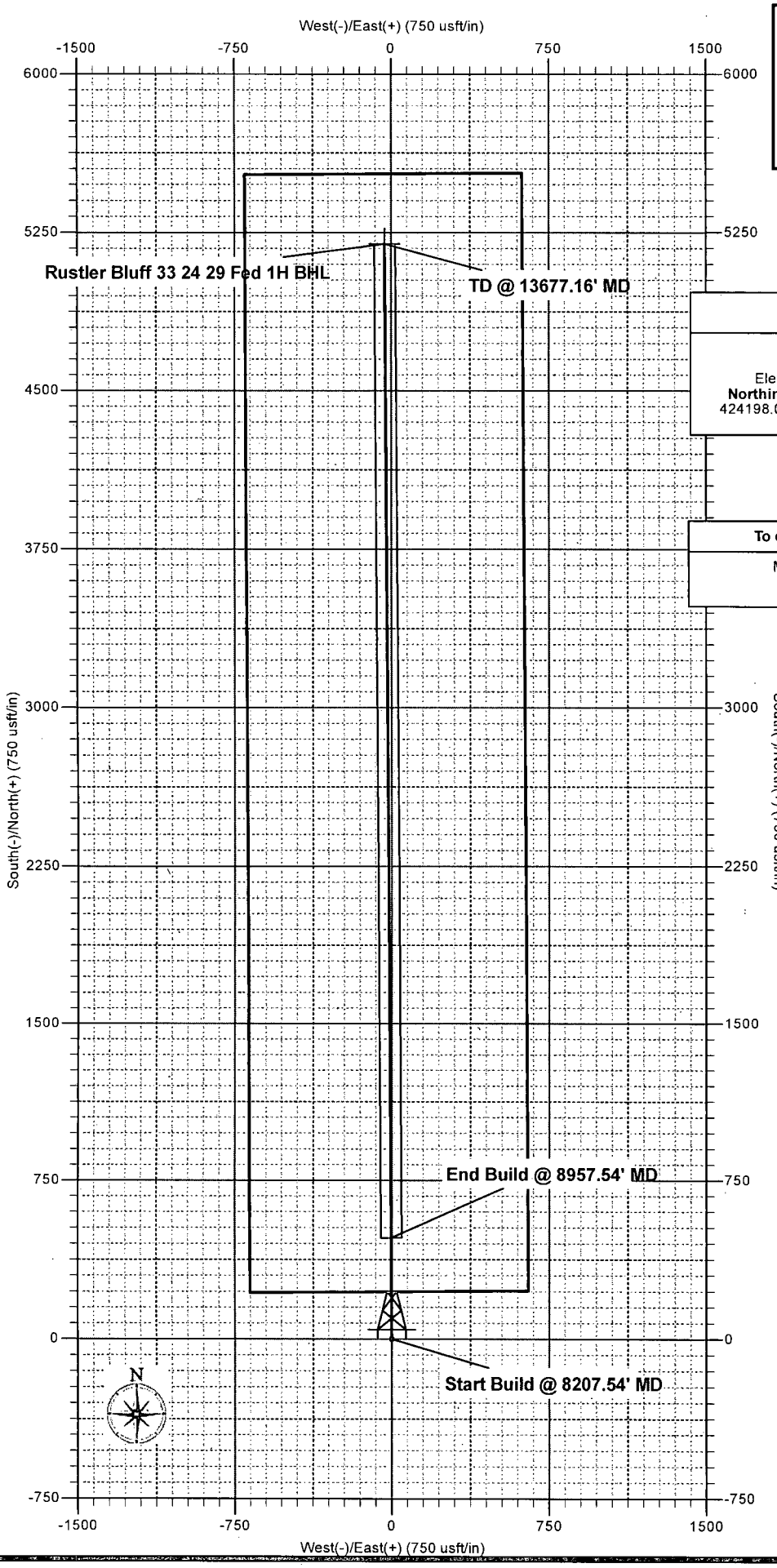
To convert a Magnetic Direction to a Grid Direction, Add 7.36°

Magnetic Model: BGGM2013 Date: 26-Mar-14
Azimuths to Grid North



Created By: Clyde J. Geoffroy Date: 12:05, March 26 2014

Chevron USA, Inc.



Project: Eddy County, NM
Site: Rustler Bluff 33 24 29 Fed
Well: Rustler Bluff 33 24 29 Fed 1H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: Ensign 767

SURFACE LOCATION

US State Plane 1927 (Exact solution)
New Mexico East 3001
Elevation: GL 2934.0' + KB 25.0' @ 2959.00usft (Ensign 767)

Northing	Easting	Latittude	Longitude
424198.00	607223.00	32° 9' 56.746 N	103° 59' 12.562 W

To convert a Magnetic Direction to a Grid Direction, Add 7.36°

Magnetic Model: BGGM2013 Date: 26-Mar-14
Azimuths to Grid North

TARGET INFORMATION:

8685.0' TVD @ 0.0' VS w/0.00° Dip
10' Up & 10' Down
50' Left & 50' Right

Created By: Clyde J. Geoffroy Date: 12:04, March 26 2014

Chevron USA, Inc.

Eddy County, NM
Rustler Bluff 33 24 29 Fed
Rustler Bluff 33 24 29 Fed 1H

Wellbore #1

Plan: Plan #1

Standard Planning Report

26 March, 2014

Database:	STXWP_EDM	**Local Co-ordinate Reference:**	Well Rustler Bluff 33 24 29 Fed 1H
Company:	Chevron USA, Inc.	**TVD Reference:**	GL 2934.0' + KB 25.0' @ 2959.00usft (Ensign 767)
Project:	Eddy County, NM	**MD Reference:**	GL 2934.0' + KB 25.0' @ 2959.00usft (Ensign 767)
Site:	Rustler Bluff 33 24 29 Fed	**North Reference:**	Grid
Well:	Rustler Bluff 33 24 29 Fed 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project Eddy County, NM

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Rustler Bluff 33 24 29 Fed

Site Position:		**Northing:**	424,198.00 usft	**Latitude:**	32° 9' 56.746 N
From:	Map	**Easting:**	607,223.00 usft	**Longitude:**	103° 59' 12.562 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.18 °

Well Rustler Bluff 33 24 29 Fed 1H

Well Position	**+N/-S**	0.00 usft	**Northing:**	424,198.00 usft	**Latitude:**	32° 9' 56.746 N
	+E/-W	0.00 usft	**Easting:**	607,223.00 usft	**Longitude:**	103° 59' 12.562 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	2,934.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	3/26/2014	7.55	59.98	48,236

Design Plan #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.66

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,207.54	0.00	0.00	8,207.54	0.00	0.00	0.00	0.00	0.00	0.00	
8,957.54	90.00	359.66	8,685.00	477.46	-2.85	12.00	12.00	0.00	359.66	
13,677.16	90.00	359.66	8,685.00	5,197.00	-31.00	0.00	0.00	0.00	0.00	

Database:	STXWP_EDM	**Local Co-ordinate Reference:**	Well Rustler Bluff 33 24 29 Fed 1H
Company:	Chevron USA Inc	**TVD Reference:**	GL 2934.0' + KB 25.0' @ 2959.00usft (Ensign 767)
Project:	Eddy County, NM	**MD Reference:**	GL 2934.0' + KB 25.0' @ 2959.00usft (Ensign 767)
Site:	Rustler Bluff 33 24 29 Fed	**North Reference:**	Grid
Well:	Rustler Bluff 33 24 29 Fed 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,207.54	0.00	0.00	8,207.54	0.00	0.00	0.00	0.00	0.00	0.00
Start Build @ 8207.54 MD - Build Rate = 12.00°/100'									
8,300.00	11.10	359.66	8,299.42	8.93	-0.05	8.93	12.00	12.00	0.00
8,400.00	23.10	359.66	8,394.83	38.27	-0.23	38.27	12.00	12.00	0.00
8,500.00	35.10	359.66	8,482.05	86.81	-0.52	86.81	12.00	12.00	0.00
8,600.00	47.10	359.66	8,557.27	152.42	-0.91	152.42	12.00	12.00	0.00
8,700.00	59.10	359.66	8,617.21	232.23	-1.39	232.24	12.00	12.00	0.00
8,800.00	71.10	359.66	8,659.25	322.77	-1.93	322.77	12.00	12.00	0.00
8,900.00	83.10	359.66	8,681.54	420.06	-2.51	420.07	12.00	12.00	0.00
8,957.54	90.00	359.66	8,685.00	477.46	-2.85	477.47	12.00	12.00	0.00
End Build @ 8957.54 MD - Hold Angle @ 90.00°									
9,000.00	90.00	359.66	8,685.00	519.92	-3.10	519.93	0.00	0.00	0.00
9,100.00	90.00	359.66	8,685.00	619.92	-3.70	619.93	0.00	0.00	0.00
9,200.00	90.00	359.66	8,685.00	719.92	-4.29	719.93	0.00	0.00	0.00
9,300.00	90.00	359.66	8,685.00	819.92	-4.89	819.93	0.00	0.00	0.00
9,400.00	90.00	359.66	8,685.00	919.91	-5.49	919.93	0.00	0.00	0.00
9,500.00	90.00	359.66	8,685.00	1,019.91	-6.08	1,019.93	0.00	0.00	0.00
9,600.00	90.00	359.66	8,685.00	1,119.91	-6.68	1,119.93	0.00	0.00	0.00
9,700.00	90.00	359.66	8,685.00	1,219.91	-7.28	1,219.93	0.00	0.00	0.00
9,800.00	90.00	359.66	8,685.00	1,319.91	-7.87	1,319.93	0.00	0.00	0.00
9,900.00	90.00	359.66	8,685.00	1,419.90	-8.47	1,419.93	0.00	0.00	0.00
10,000.00	90.00	359.66	8,685.00	1,519.90	-9.07	1,519.93	0.00	0.00	0.00
10,100.00	90.00	359.66	8,685.00	1,619.90	-9.66	1,619.93	0.00	0.00	0.00
10,200.00	90.00	359.66	8,685.00	1,719.90	-10.26	1,719.93	0.00	0.00	0.00
10,300.00	90.00	359.66	8,685.00	1,819.90	-10.86	1,819.93	0.00	0.00	0.00
10,400.00	90.00	359.66	8,685.00	1,919.90	-11.45	1,919.93	0.00	0.00	0.00
10,500.00	90.00	359.66	8,685.00	2,019.89	-12.05	2,019.93	0.00	0.00	0.00
10,600.00	90.00	359.66	8,685.00	2,119.89	-12.65	2,119.93	0.00	0.00	0.00
10,700.00	90.00	359.66	8,685.00	2,219.89	-13.24	2,219.93	0.00	0.00	0.00
10,800.00	90.00	359.66	8,685.00	2,319.89	-13.84	2,319.93	0.00	0.00	0.00
10,900.00	90.00	359.66	8,685.00	2,419.89	-14.43	2,419.93	0.00	0.00	0.00
11,000.00	90.00	359.66	8,685.00	2,519.88	-15.03	2,519.93	0.00	0.00	0.00
11,100.00	90.00	359.66	8,685.00	2,619.88	-15.63	2,619.93	0.00	0.00	0.00
11,200.00	90.00	359.66	8,685.00	2,719.88	-16.22	2,719.93	0.00	0.00	0.00
11,300.00	90.00	359.66	8,685.00	2,819.88	-16.82	2,819.93	0.00	0.00	0.00
11,400.00	90.00	359.66	8,685.00	2,919.88	-17.42	2,919.93	0.00	0.00	0.00
11,500.00	90.00	359.66	8,685.00	3,019.88	-18.01	3,019.93	0.00	0.00	0.00
11,600.00	90.00	359.66	8,685.00	3,119.87	-18.61	3,119.93	0.00	0.00	0.00
11,700.00	90.00	359.66	8,685.00	3,219.87	-19.21	3,219.93	0.00	0.00	0.00
11,800.00	90.00	359.66	8,685.00	3,319.87	-19.80	3,319.93	0.00	0.00	0.00
11,900.00	90.00	359.66	8,685.00	3,419.87	-20.40	3,419.93	0.00	0.00	0.00
12,000.00	90.00	359.66	8,685.00	3,519.87	-21.00	3,519.93	0.00	0.00	0.00
12,100.00	90.00	359.66	8,685.00	3,619.87	-21.59	3,619.93	0.00	0.00	0.00
12,200.00	90.00	359.66	8,685.00	3,719.86	-22.19	3,719.93	0.00	0.00	0.00
12,300.00	90.00	359.66	8,685.00	3,819.86	-22.79	3,819.93	0.00	0.00	0.00
12,400.00	90.00	359.66	8,685.00	3,919.86	-23.38	3,919.93	0.00	0.00	0.00
12,500.00	90.00	359.66	8,685.00	4,019.86	-23.98	4,019.93	0.00	0.00	0.00
12,600.00	90.00	359.66	8,685.00	4,119.86	-24.57	4,119.93	0.00	0.00	0.00
12,700.00	90.00	359.66	8,685.00	4,219.85	-25.17	4,219.93	0.00	0.00	0.00
12,800.00	90.00	359.66	8,685.00	4,319.85	-25.77	4,319.93	0.00	0.00	0.00
12,900.00	90.00	359.66	8,685.00	4,419.85	-26.36	4,419.93	0.00	0.00	0.00

Database:	STXWP_EDM	Local Co-ordinate Reference:	Well Rustler Bluff 33 24 29 Fed 1H
Company:	Chevron USA, Inc.	TVD Reference:	GL 2934.0' + KB 25.0 @ 2959.00usft (Ensign 767)
Project:	Eddy County, NM	MD Reference:	GL 2934.0' + KB 25.0 @ 2959.00usft (Ensign 767)
Site:	Rustler Bluff 33 24 29 Fed	North Reference:	Grid
Well:	Rustler Bluff 33 24 29 Fed 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,000.00	90.00	359.66	8,685.00	4,519.85	-26.96	4,519.93	0.00	0.00	0.00
13,100.00	90.00	359.66	8,685.00	4,619.85	-27.56	4,619.93	0.00	0.00	0.00
13,200.00	90.00	359.66	8,685.00	4,719.85	-28.15	4,719.93	0.00	0.00	0.00
13,300.00	90.00	359.66	8,685.00	4,819.84	-28.75	4,819.93	0.00	0.00	0.00
13,400.00	90.00	359.66	8,685.00	4,919.84	-29.35	4,919.93	0.00	0.00	0.00
13,500.00	90.00	359.66	8,685.00	5,019.84	-29.94	5,019.93	0.00	0.00	0.00
13,600.00	90.00	359.66	8,685.00	5,119.84	-30.54	5,119.93	0.00	0.00	0.00
13,677.16	90.00	359.66	8,685.00	5,197.00	-31.00	5,197.09	0.00	0.00	0.00
TD @ 13677.16' MD - Rustler Bluff 33 24 29 Fed 1H BHL									

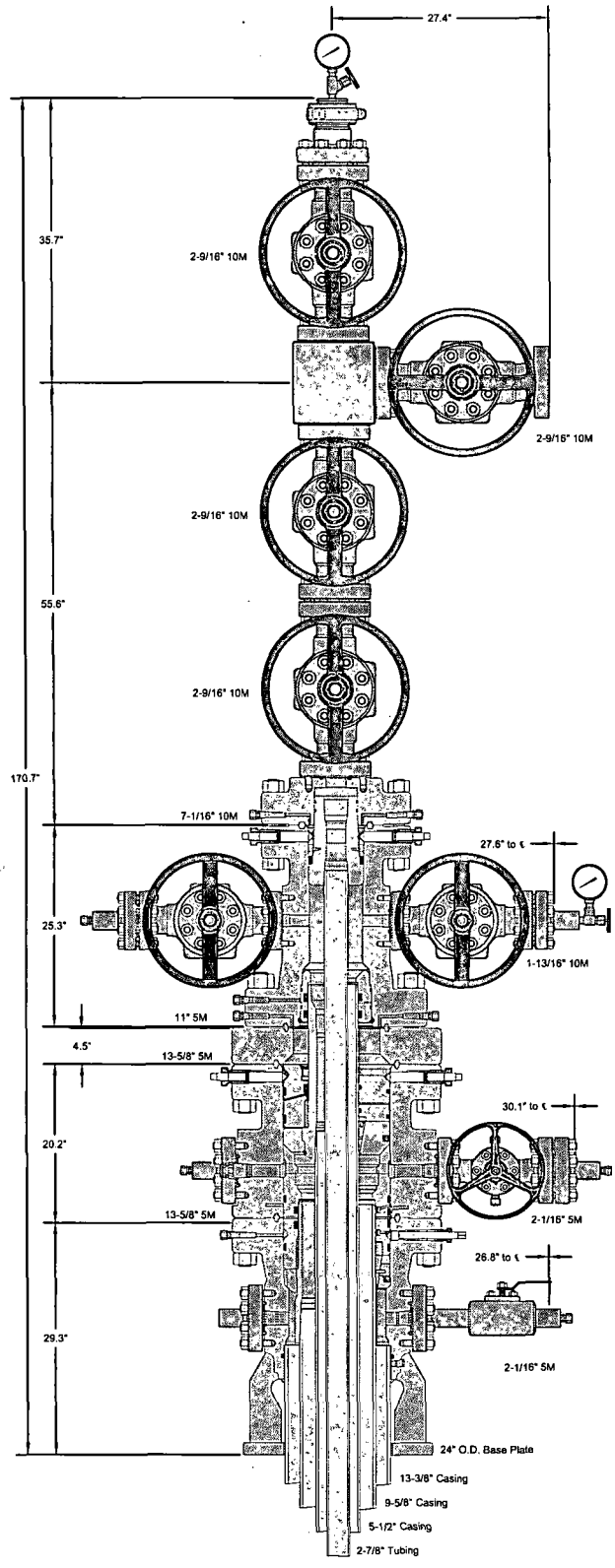
Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Rustler Bluff 33 24 29	0.00	359.66	8,685.00	5,197.00	-31.00	429,395.00	607,192.00	32° 10' 48.178 N	103° 59' 12.728 W
- plan hits target center									
- Rectangle (sides W100.00 H4,719.63 D20.00)									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
8,207.54	8,207.54	0.00	0.00	Start Build @ 8207.54' MD
8,207.54	8,207.54	0.00	0.00	Build Rate = 12.00°/100'
8,957.54	8,685.00	477.46	-2.85	End Build @ 8957.54' MD
8,957.54	8,685.00	477.46	-2.85	Hold Angle @ 90.00°
13,677.16	8,685.00	5,197.00	-31.00	TD @ 13677.16' MD

GE Oil & Gas



CHEVRON USA, INC.
DELAWARE BASIN

13-3/8" x 9-5/8" x 5-1/2" x 2-7/8" 10M SH2/Conventional Wellhead Assembly, With DSA, T-EBS-F Tubing Head, T-EN Tubing Hanger and A5PEN Adapter Flange

DRAWN	VJK	19MAR13
APPRV	KN	19MAR13

FOR REFERENCE ONLY

DRAWING NO. AE23705

BLOWOUT PREVENTOR SCHEMATIC

Minimum Requirements

OPERATION : Intermediate and Production Hole Sections

Minimum System Pressure Rating : **5,000 psi**

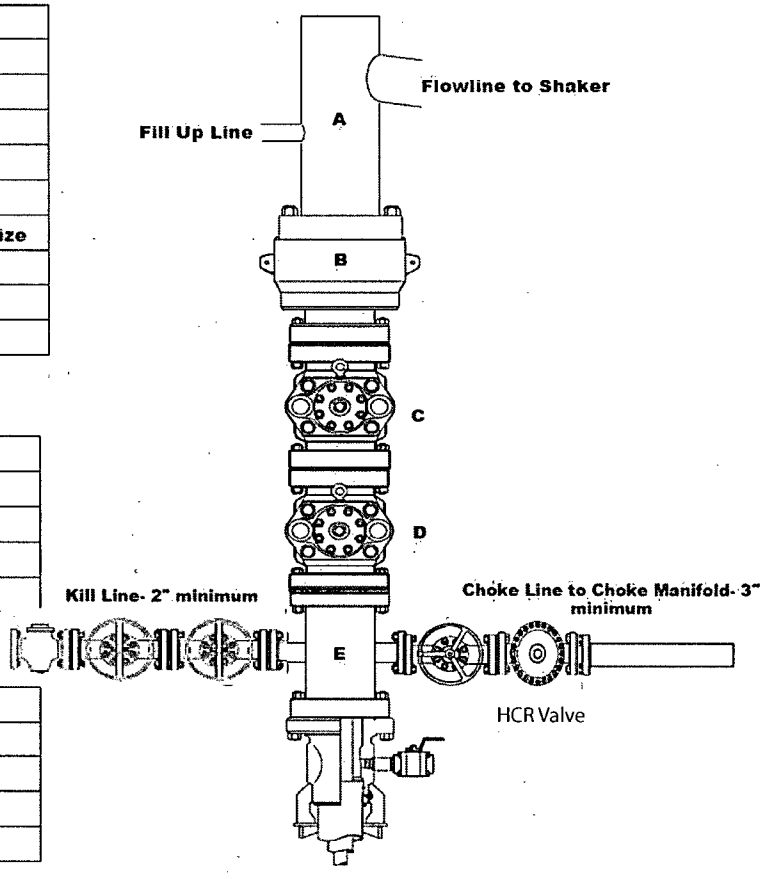
	SIZE	PRESSURE	DESCRIPTION
A		N/A	Bell Nipple
B	13 5/8"	5,000 psi	Annular
C	13 5/8"	5,000 psi	Pipe Ram
D	13 5/8"	5,000 psi	Blind Ram
E	13 5/8"	5,000 psi	Mud Cross
F			
DSA		As required for each hole size	
C-Sec			
B-Sec		13-5/8" 5K x 11" 5K	
A-Sec		13-3/8" SOW x 13-5/8" 5K	

Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	5,000 psi	Gate Valve
2"	5,000 psi	Gate Valve
2"	5,000 psi	Check Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
3"	5,000 psi	Gate Valve
3"	5,000 psi	HCR Valve



Installation Checklist

The following item must be verified and checked off prior to pressure testing of BOP equipment.

- ☐ **The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.**
- ☐ **All valves on the kill line and choke line will be full opening and will allow straight though flow.**
- ☐ **The kill line and choke line will be straight unless turns use tee blocks or are targeted with running tess, and will be anchored to prevent whip and reduce vibration.**
- ☐ **Manual (hand wheels) or automatic locking devices will be installed on all ram preventers. Hand wheels will also be installed on all manual valves on the choke line and kill line.**
- ☐ **A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will remain open unless accumulator is inoperative.**
- ☐ **Upper kelly cock valve with handle will be available on rig floor along with safety valve and subs to fit all drill string connections in use.**

After Installation Checklist is complete, fill out the information below and email to Superintendent and Drilling Engineer

Wellname: _____

Representative: _____

Date: _____

CHOKE MANIFOLD SCHEMATIC

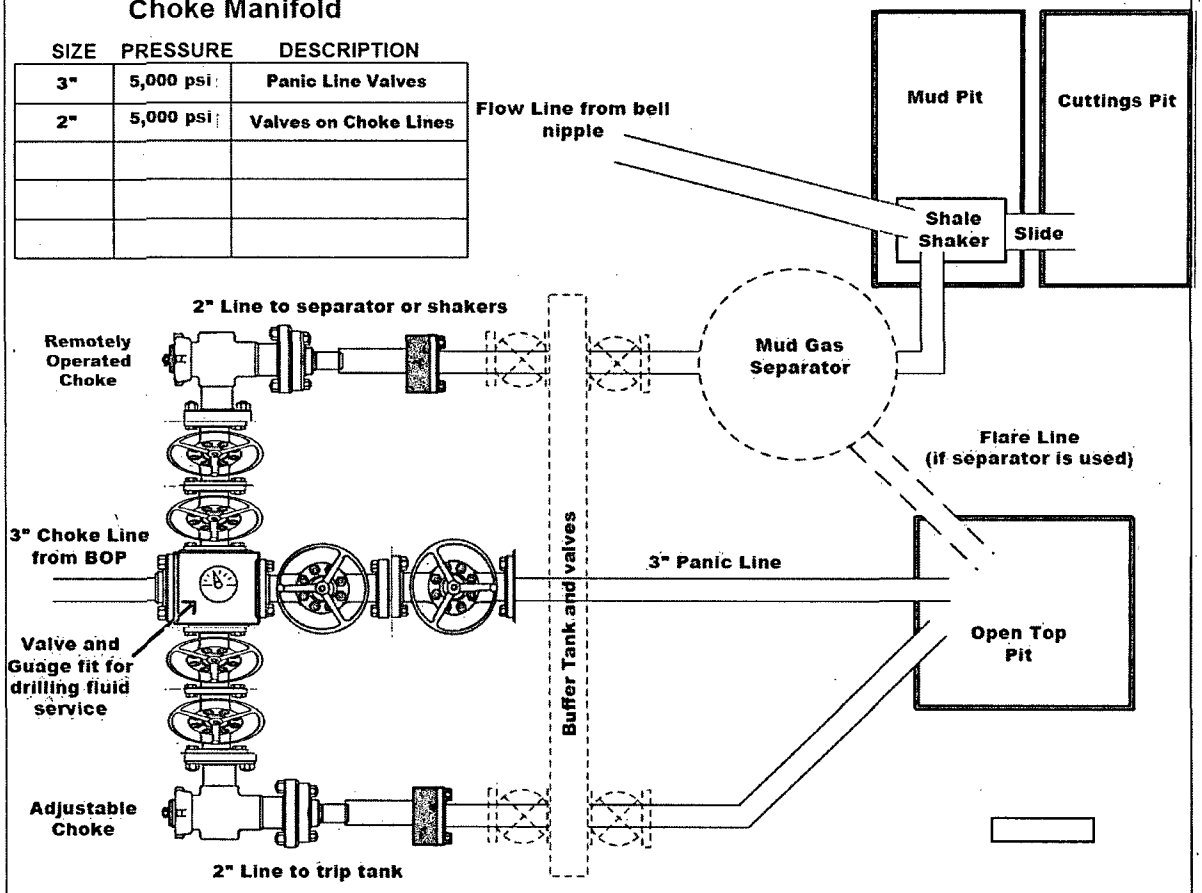
Minimum Requirements

OPERATION : Intermediate and Production Hole Sections

Minimum System Pressure Rating : **5,000 psi**

Choke Manifold

SIZE	PRESSURE	DESCRIPTION
3"	5,000 psi	Panic Line Valves
2"	5,000 psi	Valves on Choke Lines



Installation Checklist

The following item must be verified and checked off prior to pressure testing of BOP equipment.

- ☐ **The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.**
- ☐ **Adjustable Chokes may be Remotely Operated but will have backup hand pump for hydraulic actuation in case of loss of rig air pressure or power.**
- ☐ **Flare and Panic lines will terminate a minimum of 150' from the wellhead. These lines will terminate at a location as per approved APD.**
- ☐ **The choke line, kill line, and choke manifold lines will be straight unless turns use tee blocks or are targeted with running tess, and will be anchored to prevent whip and reduce vibration. This excludes the line between mud gas separator and shale shaker.**
- ☐ **All valves (except chokes) on choke line, kill line, and choke manifold will be full opening and will allow straight through flow. This excludes any valves between mud gas separator and shale shakers.**
- ☐ **All manual valves will have hand wheels installed.**
- ☐ **If used, flare system will have effective method for ignition**
- ☐ **All connections will be flanged, welded, or clamped (no threaded connections like hammer unions)**
- ☐ **If buffer tank is used, a valve will be used on all lines at any entry or exit point to or from the buffer tank.**

After Installation Checklist is complete, fill out the information below and email to Superintendent and Drilling Engineer

Wellname: _____

Representative: _____

Date: _____

BOPE Testing

Minimum Requirements

Closing Unit and Accumulator Checklist

The following item must be performed, verified, and checked off at least once per well prior to low/high pressure testing of BOP equipment. This must be repeated after 6 months on the same well.

☐ **Precharge pressure for each accumulator bottle must fall within the range below. Bottles may be further charged with nitrogen gas only. Tested precharge pressures must be recorded for each individual bottle and kept on location through the end of the well. Test will be conducted prior to connecting unit to BOP stack.**

Check one that applies	Accumulator working pressure rating	Minimum acceptable operating pressure	Desired precharge pressure	Maximum acceptable precharge pressure	Minimum acceptable precharge pressure
☐	1500 psi	1500 psi	750 psi	800 psi	700 psi
☐	2000 psi	2000 psi	1000 psi	1100 psi	900 psi
☐	3000 psi	3000 psi	1000 psi	1100 psi	900 psi

☐ **Accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if used), close all rams, close the annular preventer, and retain a minimum of 200 psi above the maximum acceptable precharge pressure (see table above) on the closing manifold without the use of the closing pumps. This test will be performed with test pressure recorded and kept on location through the end of the well**

☐ **Accumulator fluid reservoir will be double the usable fluid volume of the accumulator system capacity. Fluid level will be maintained at manufacturer's recommendations. Usable fluid volume will be recorded. Reservior capacity will be recorded. Reservoir fluid level will be recorded along with manufacturer's recommendation. All will be kept on location through the end of the well.**

☐ **Closing unit system will have two independent power sources (not counting accumulator bottles) to close the preventers.**

☐ **Power for the closing unit pumps will be available to the unit at all times so that the pumps will automatically start when the closing valve manifold pressure decreases to the pre-set level. It is recommended to check that air line to accumulator pump is "ON" during each tour change.**

☐ **With accumulator bottles isolated, closing unit will be capable of opening the hydraulically-operated choke line valve (if used) plus close the annular preventer on the smallest size drill pipe within 2 minutes and obtain a minimum of 200 psi above maximum acceptable precharge pressure (see table above) on the closing manifold. Test pressure and closing time will be recorded and kept on location through the end of the well.**

☐ **Master controls for the BOPE system will be located at the accumulator and will be capable of opening and closing all preventer and the choke line valve (if used)**

☐ **Remote controls for the BOPE system will be readily accessible (clear path) to the driller and located on the rig floor (not in the dog house). Remote controls will be capable of closing all preventers.**

☐ **Record accumulator tests in drilling reports and IADC sheet**

BOPE Test Checklist

The following item must be ckecked off prior to beginning test

☐ **BLM will be given at least 4 hour notice prior to beginning BOPE testing**

☐ **Valve on casing head below test plug will be open**

☐ **Test will be performed using clear water.**

The following item must be performed during the BOPE testing and then checked off

☐ **BOPE will be pressure tested when initially installed, whenever any seal subject to test pressure is broken, following related repairs, and at a minimum of 30 days intervals. Test pressure and times will be recorded by a 3rd party on a test chart and kept on location through the end of the well.**

☐ **Test plug will be used**

☐ **Ram type preventer and all related well control equipment will be tested to 250 psi (low) and 5,000 psi (high).**

☐ **Annular type preventer will be tested to 250 psi (low) and 3,500 psi (high).**

☐ **Valves will be tested from the working pressure side with all down stream valves open. The check valve will be held open to test the kill line valve(s)**

☐ **Each pressure test will be held for 10 minutes with no allowable leak off.**

☐ **Master controls and remote controls to the closing unit (accumulator) must be function tested as part of the BOP testing**

☐ **Record BOP tests and pressures in drilling reports and IADC sheet**

After Installation Checklist is complete, fill out the information below and email to Superintendent and Drilling Engineer along with any/all BOP and accumulator test charts and reports from 3rd parties.

Wellname: _____

Representative: _____

Date: _____

Midwest Hose
& Specialty, Inc.

INTERNAL HYDROSTATIC TEST CERTIFICATE

Customer:	Customer P.O. Number:
ODESSA	193072

HOSE SPECIFICATIONS

Type:	Hose Length:
Rotary/CHOKE KILL GRADE E / API 7K	25' FEET

I.D.	O.D.
3" INCHES	4.77 INCHES

WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE
10,000 PSI	15,000 PSI	N/A PSI

COUPLINGS

Part Number	Stem Lot Number	Ferrule Lot Number
E3.0X64WB		L08301765
E3.0X64WB		L08301765

Type of Coupling:	Die Size:
SWAGE-IT	5.25

PROCEDURE

Hose assembly pressure tested with water at ambient temperature

TIME HELD AT TEST PRESSURE	ACTUAL BURST PRESSURE:
3 1/2 MIN.	N/A PSI

Hose Assembly Serial Number:	Hose Serial Number:
212332	8104

Comments:

Date:	Tested:	Approved:
8/7/2013		

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

August 7, 2013

Customer: Odessa

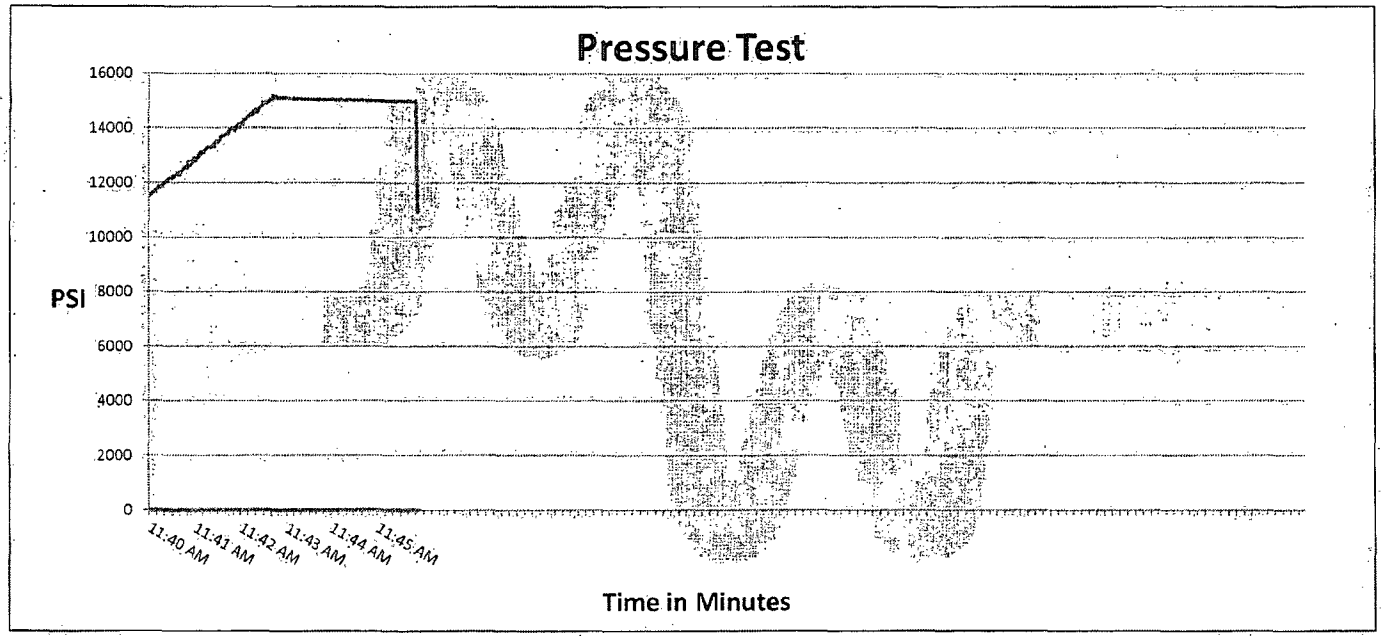
Pick Ticket #: 212332

Hose Specifications

Hose Type	Length
E	25'
I.D.	**O.D.**
3""	4.77"
Working Pressure	**Burst Pressure**
7500 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4 1/16 10K	Swage
Die Size	**Final O.D.**
5.25"	5.31"
Hose Serial #	**Hose Assembly Serial #**
8104	212332



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	3 2/4 Minutes		15263 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

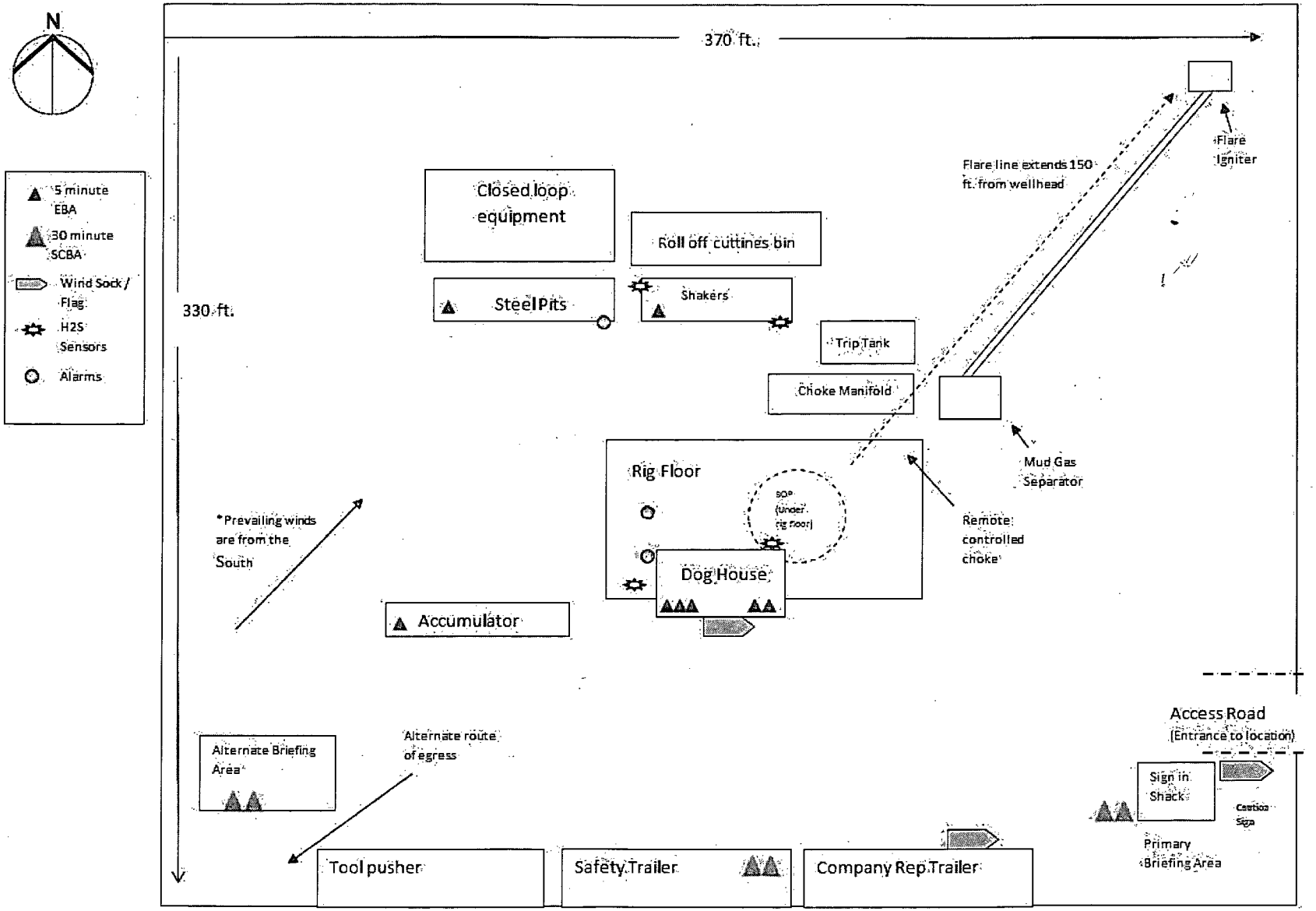
Tested By: *Ryan Malone*

x _____

Approved By: *Ryan Adams*

x _____

H_2S Preparedness and Contingency Plan Summary



Ensign 767 Pad Layout (330' x 370')

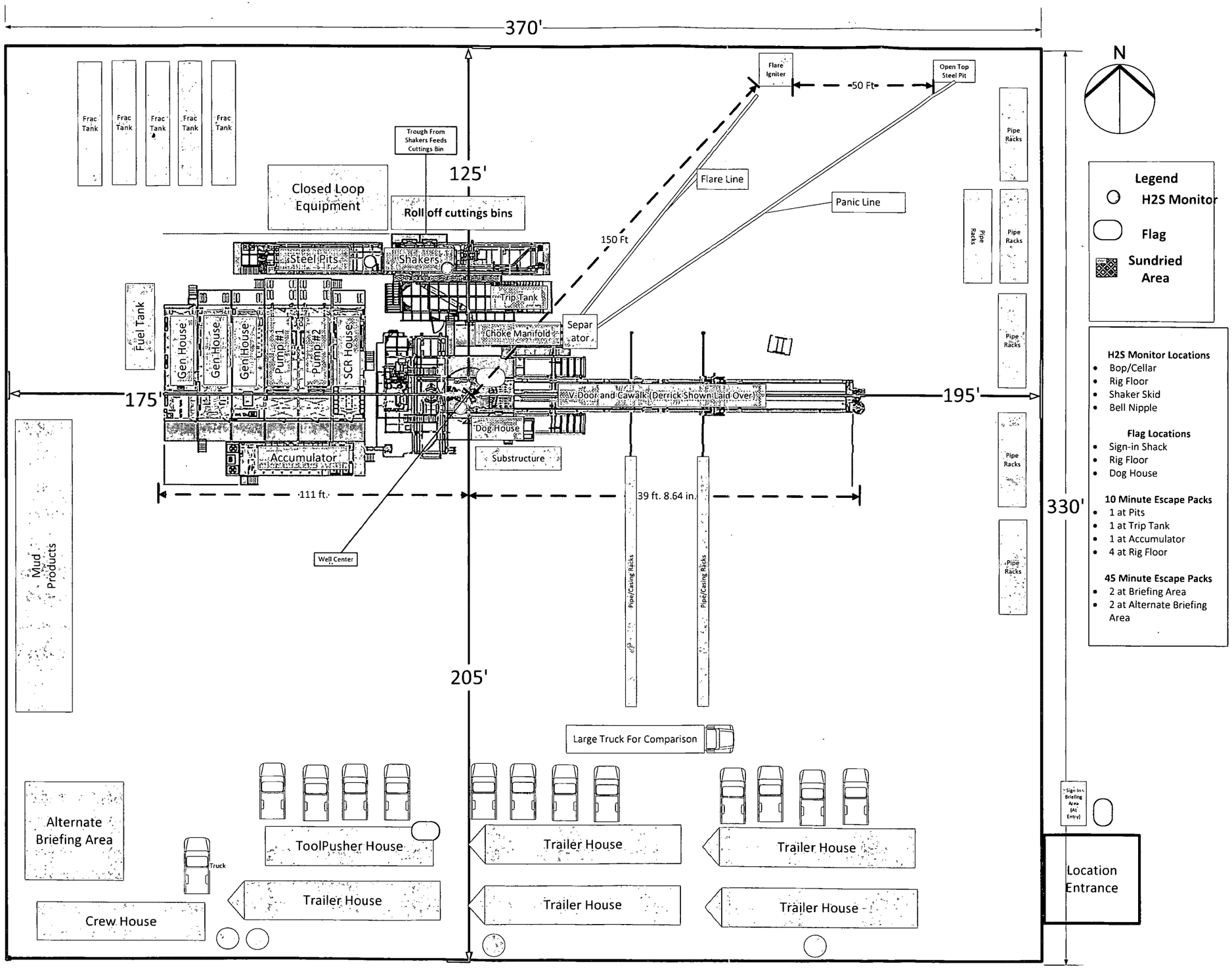


Exhibit D

H_2S Preparedness and Contingency Plan Summary

Rustler Bluff 33-24-29 Fed Com 1H

Training

MCBU Drilling and Completions H_2S training requirements are intended to define the minimum level of training required for employees, contractors and visitors to enter or perform work at MCBU Drilling and Completions locations that have known concentrations of H_2S.

Awareness Level

Employees and visitors to MCBU Drilling and Completions locations that have known concentrations of H_2S, who are not required to perform work in H_2S areas, will be provided with an awareness level of H_2S training prior to entering any H_2S areas. At a minimum, awareness level training will include:

1. Physical and chemical properties of H_2S
2. Health hazards of H_2S
3. Personal protective equipment
4. Information regarding potential sources of H_2S
5. Alarms and emergency evacuation procedures

Awareness level training will be developed and conducted by personnel who are qualified either by specific training, educational experience and/or work-related background.

Advanced Level H_2S Training

Employees and contractors required to work in areas that may contain H_2S will be provided with Advanced Level H_2S training prior to initial assignment. In addition to the Awareness Level requirements, Advanced Level H_2S training will include:

1. H_2S safe work practice procedures;
2. Emergency contingency plan procedures;
3. Methods to detect the presence or release of H_2S (e.g., alarms, monitoring equipment), including hands-on training with direct reading and personal monitoring H_2S equipment.
4. Basic overview of respiratory protective equipment suitable for use in H_2S environments. Note: Employees who work at sites that participate in the Chevron Respirator User program will require separate respirator training as required by the MCBU Respiratory Protection Program;
5. Basic overview of emergency rescue techniques, first aid, CPR and medical evaluation procedures. Employees who may be required to perform "standby" duties are required to receive additional first aid and CPR training, which is not covered in the Advanced Level H_2S training;
6. Proficiency examination covering all course material.

Advanced H_2S training courses will be instructed by personnel who have successfully completed an appropriate H_2S train-the-trainer development course (ANSI/ASSE Z390.1-2006) or who possess significant past experience through educational or work-related background.

H_2S Training Certification

All employees and visitors will be issued an H_2S training certification card (or certificate) upon successful completion of the appropriate H_2S training course. Personnel working in an H_2S environment will carry a current H_2S training certification card as proof of having received the proper training on their person at all times.

Briefing Area

A minimum of two briefing areas will be established in locations that at least one area will be up-wind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated upwind briefing areas for instructions.

H_2S Equipment

Respiratory Protection

a) Six 30 minute SCBAs – 2 at each briefing area and 2 in the Safety Trailer.

b) Eight 5 minute EBAs – 5 in the dog house at the rig floor, 1 at the accumulator, 1 at the shale shakers and 1 at the mud pits.

Visual Warning System

a) One color code sign, displaying all possible conditions, will be placed at the entrance to the location with a flag displaying the current condition.

b) Two windsocks will be on location, one on the dog house and one on the Drill Site Manager's Trailer.

H_2S Detection and Monitoring System

a) H_2S monitoring system (sensor head, warning light and siren) placed throughout rig.

- Drilling Rig Locations: at a minimum, in the area of the Shale shaker, rig floor, and bell nipple.
- Workover Rig Locations: at a minimum, in the area of the Cellar, rig floor and circulating tanks or shale shaker.

Well Control Equipment

a) Flare Line 150' from wellhead with igniter.

b) Choke manifold with a remotely operated choke.

c) Mud / gas separator

Mud Program

In the event of drilling, completions, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater the following shall be considered:

1. Use of a degasser
2. Use of a zinc based mud treatment
3. Increasing mud weight

Public Safety - Emergency Assistance

Agency	Telephone Number
Eddy County Sheriff's Department	575-887-7551
Fire Department:	
Carlsbad	575-885-3125
Artesia	575-746-5050
Carlsbad Medical Center	575-887-4100
Eddy County Emergency Management	575-628-5450
Poison Control Center	800-222-1222

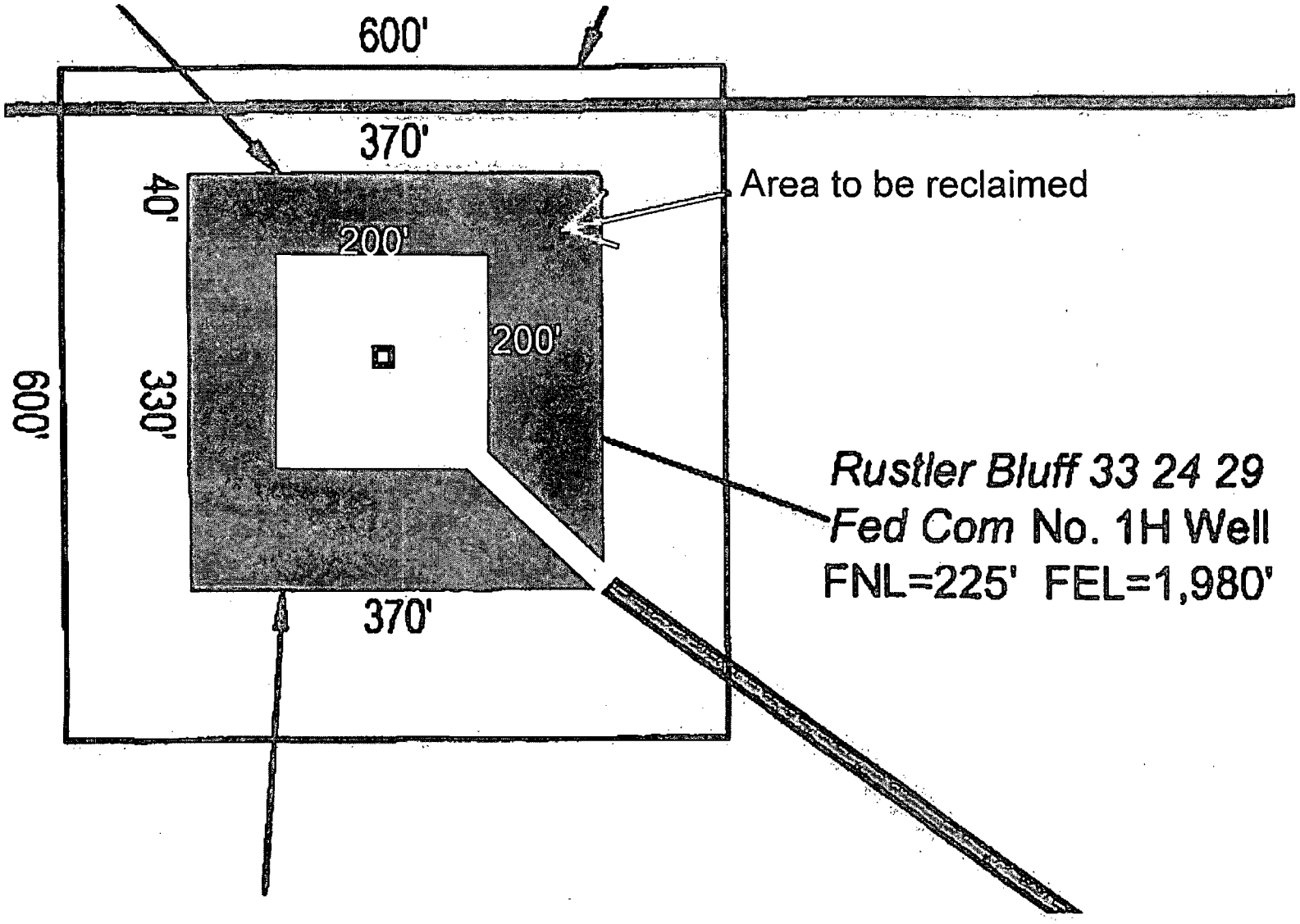
H_2S Preparedness and Contingency Plan Summary

Chevron MCBU D&C Emergency Notifications

Below are lists of contacts to be used in emergency situations.

	Name	Title	Office Number	Cell Phone
1.	Matt Kubachka	Drilling Engineer	(713) 372-5721	(432) 438-2482
2.	Phil Clark	Superintendent	(713) 372-7588	(832) 741-4175
5.	Kim McHugh	Drilling Manager	(713) 372-7591	(713) 204- 8550
6.	Darrell Hammons	Operations Manager	(713) 372-5747	(281) 352 2302
7.	Andrea Calhoun	D&C HES	(713) 372-7586	(832) 588-0100
8.	Andrew Espinosa	Completion Engineer	(713) 372-7587	(713) 294-9534

Exhibit E


600'
370'
40'
200'
200'
330'
600'
Area to be reclaimed
Rustler Bluff 33 24 29
Fed Com No. 1H Well
FNL=225' FEL=1,980'
370'

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

Rustler Bluff 33 24 29 Fed Com 1H
225' FNL and 1980' FEL of S4 T25S-R29E
Section 33, Township 24, Range 29
Eddy County, New Mexico

A. EXISTING ROADS/LEASE ROADS

Driving directions are from Malaga, New Mexico. Proceed east on Duarte Road approximately 1.3 miles to McDonald Road (CR 748) and follow this road approximately 9 miles and turn southeast on an existing road and go 5.5 miles to location in Section 3.

This lease road is approximately 20' in travel way width and approximately 2 miles in length with a maximum disturbance area of 30' has been used, and in accordance with guidelines set forth in the BLM Onshore Orders. No turnouts are expected.

Existing county and lease roads will be used to enter proposed access road.

The existing road is measured from McDonald Road.

Total Length of Existing Roads: **30,546.24'**
Total Length of New Roads: **39,826.41'**
= 30,546.24' existing roads
+ 3275.56' from the existing roads to the facility
+ 6004.61' from the facility to the well

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

Location, access, and vicinity plats attached hereto. **See Exhibits A-1 to A-3.**
Please see **Exhibit A2** for the location of the access road to the well pad.
Please see **Exhibit H** for the location of the access road to the proposed facilities.

Chevron will maintain existing roads in a condition the same or better than before operations begin. All existing structures on the entire access route such as cattle guards, culverts, fences, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use. All pot holes, drainages, road crowns, etc., will be repaired to maintain current road conditions. We will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or high wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.

B. NEW OR RECONSTRUCTED ACCESS ROADS

The access road has not been constructed.

The new access road will be upgraded to a crowned and ditched road and will be graveled as needed for drilling. If requested by the surface owner, upgrading of this portion of the road will be kept to a minimum.

The existing two-track road identified in the survey plat will be upgraded to an oil and gas road (14' wide). Please see **Exhibit A2 and H** to view the access road. The access road and flowline follow the same route. For distances between PIs, please see **Exhibit G2**, the legal description of flowline plat.

All existing roads (previously improved) will be used "as is" with the exception of minor blading as needed.

Surface disturbance and vehicular travel will be limited to the approved access route. Any additional area will be approved in advance.

Road Width: 14 – 20 feet traveling surface.

Maximum Grade: Road gradient less than 8%

Crown Design: 2%

Turnouts will be installed along the access route as needed.

Ditch design: Drainage, interception and outlet.

Erosion Control: 6" rock under road.

Re-vegetation of Disturbed Area: All disturbed areas will be seeded by Broadcast or Drill and Crimp. Ground conditions will determine the method used.

Cattle guard(s) will be installed as needed.

Major Cuts and Fills: 2:1 Slope.

Surfacing material (road base derived from caliche or river rock) will be placed on the access road during construction. All surface disturbing activities will be discussed with and agreed to with the surface owner.

C. LOCATION OF EXISTING WELLS

All wells located within a 1-mile radius of the Surface & Bottom Hole Location. **See Exhibit B.**

D. LOCATION OF PRODUCTION FACILITIES

It is anticipated that production facilities will be located in Section 3 being east of the well and oil to be sold at that tank battery. Oil and gas measurement will be installed on this well location. **See Exhibit C.**

The facility will be located in the NE corner of S3 T25S-R29E. Please see Exhibit F for the individual survey plat of the offsite production facility and **Exhibit H** for the access road to the facility. This plat depicts the offsite production facility including the access road, accurate dimensions of the facility pad, flare dimensions, and tie-in points to section corner.

The production line will be buried 3 1/2" Fiberglass Pipe with a working pressure greater than 100 psi ran along existing disturbances.

The proposed flowline will begin at the southeast corner of the Rustler Bluff 33-24-29 1H well pad and continue for 8,821' until it terminates at the Section 34 facility pad. The pipeline will be buried 15' from the road. 10' of ROW will be cleared on either side of the pipeline. Please see **Exhibit G** to view the proposed pipeline.

The permanent water disposal system will be determined prior to construction of any water transfer pipeline. Until permanent water takeaway is available, produced water will be hauled off location in trucks.

Utility power is anticipated in mid/late 2015. For a temporary power solution, Chevron will install generators to provide power for operations. Once utility power becomes available, a power line will be constructed as shown on the plats. Please see **Exhibit I**.

Note: Facility plats show flare pad adjacent to the facility pad. Currently, Chevron does not plan to install a flare, but plans may change depending on gas takeaway provider.

E. LOCATION AND TYPES OF WATER SUPPLY

Chevron will utilize the frac pond in section 2-T25S-R29E for fresh water. Chevron will submit a "Multi-Well Fluid management pit Business Lease" to the State for the Frac Pond. Please see **Exhibit H** for the location of the frac pond.

During frac operations, Chevron will lay a temporary 12" flowline from the frac pond to the well. The flowline will follow within 5 feet along the access road from the frac pond to the well using the same route as the proposed production pipeline depicted on **Exhibit G**.

Water will be obtained from a private water source. The source provider and exact location have not been finalized at this time. Most likely, Chevron expects to transfer water from the source well or distribution center using a temporary 4" poly pipe transfer line. Chevron will submit a sundry notice at a later date, including a plat that depicts the proposed location of the temporary 4" poly pipe transfer line to fill the frac pond.

F. CONSTRUCTION MATERIALS

All construction materials will be used from the nearest Private, BLM, or State pit. All material (i.e. shale) will be acquired from private or commercial sources.

No construction material will be needed for well pad construction; subsurface spoil material will be utilized.

Surfacing material (caliche) will be purchased from a supplier having a permitted source of materials.

The entire location will be fenced with barb/woven wire and bermed with spoil dirt or gravel.

G. METHODS FOR HANDLING WASTE DISPOSAL

A closed system will be utilized consisting of above ground steel tanks.

All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in a state approved facility.

Disposal of cuttings: **Tervita, LLC**

Sewage and gray water before and after treatment are not allowed to be discharged to the ground. They are collected from storage tank(s) and portable potty at drilling and completions locations and transported by an approved transporter to be disposed of at a Chevron's select-for-use disposal facility.

H. ANCILLARY FACILITIES

None

I. WELLSITE LAYOUT

The proposed site layout plat is attached showing the Ensign Rig #767 orientation and equipment location. **See Exhibit D.**

In order to level the location, cut and fill will be required. Please see attached Well Location and Acreage Dedication Plat – **Exhibits A-1 to A-3**.

A locking gate will be installed at the site entrance.

Any fences cut will be repaired. Cattle guards will be installed, if needed.

J. PLANS FOR RECLAMATION OF THE SURFACE

In the Event of Production

Within 6 months, Chevron will contact BLM Surface Management Specialists to devise the best strategies to reduce the size of the location. Current plans for interim reclamation will consist of reclaiming the pad to +/-50 feet outside the anchors, or approximately 200 x 200 feet. **See Exhibit E.**

In addition, the following procedures shall be followed:

i. Caliche will be removed from areas to be reclaimed, to increase the success of revegetating the site. Removed caliche that is free of contaminents may be used for future projects.
ii. The portions of the cleared well site not needed for operational and safety purposes will be recontoured to a final or intermediate contour that blends with the surrounding topography as much as possible. Sufficient level area remains for setup of a workover rig and to park equipment.
iii. All surface soil materials (topsoil) are to be removed from the entire cut and fill area and temporarily stockpiled for reuse during interim reclamation. Topsoil will be respreads over areas not needed for all-weather operations to ensure successful revegetation. Any topsoil pile set aside should be revegetated to prevent it from eroding and to help maintain its biological viability.
iv. After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture advised by the BLM. The seed mix will be evenly and uniformly distributed over the disturbed area. Seeding will be accomplished by using a drilling or, when drilling is not available, by broadcasting the seed. When broadcasting the seed, the amount of seed shall be doubled.
v. Weed control will be used on disturbed land, including the roads, pads, associated pipeline corridor, and adjacent land affected by the operations. There shall be no primary or secondary noxious weeds in the seed mixture used for reseeding.

In the Event of a Dry Hole/Final Reclamation

Upon final abandonment of the well, a new reclamation plan will be submitted with the Notice of Intent to Abandon (NIA) or Subsequent Report Plug and Abandon (SRA) using the Sundry Notices and Reports on Wells Form 3160-5. The location will be restored to as near as original condition as possible. Reclamation of the surface shall be done in strict compliance with the existing New Mexico Oil Conservation Division regulations and BLM regulations.

In addition, the following procedures shall be followed:

i. Caliche material from the well pad and access road will be removed and utilized to re-contour to a final contour that blends with the surrounding topography as much as possible. Any caliche material not used will be utilized to repair roads within the lease.
ii. On sloped ground, the topsoil and interim vegetation will be restripped from portions of the site that are not at the original contour, the well pad recontoured, and the topsoil will be respread over the entire disturbed.

iii. Topsoil will be distributed over the reclamation area and cross ripped to control erosion
iv. After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture advised by the BLM. The seed mix will be evenly and uniformly distributed over the disturbed area. Seeding will be accomplished by using a drilling or, when drilling is not available, by broadcasting the seed. When broadcasting the seed, the amount of seed shall be doubled.
v. Weed control will be used on disturbed land, including the roads, pads, associated pipeline corridor, and adjacent land affected by the operations. There shall be no primary or secondary noxious weeds in the seed mixture used for reseeding.

K. SURFACE TENANT

Name	BLM # 7036 Pierce Canyon Ranch c/o Draper Brantley & Henry McDonald
Address	P.O. Box 597 Loving, NM 88256
Phone Number	575-499-5011

ROAD OWNERSHIP
All access roads are located on Federal lands.

ROAD OWNERSHIP SURFACE TENANTS

Section	Section 29-24-30
Name	BLM # 7036 Pierce Canyon Ranch c/o Draper Brantley & Henry McDonald
Address	P.O. Box 597 Loving, NM 88256
Phone Number	575-499-5011

Section	Section 32-24-30 Sections 5, 6 & 7-25-30 Sections 1 & 2- 25-29, Eddy Co., NM
Name	#GO-1294 J.R. Engineering & Construction Attn: Jimmy Richardson
Address	P.O. Box 487 Carlsbad, NM. 88221
Phone Number	575-706-4063

There are no Deeded Surface owners that will be impacted by the Section 33 & 34 operations or access routes.

L. ADDITIONAL INFORMATION

Class III cultural resource inventory report was prepared by Boone Archaeological Services, Carlsbad, New Mexico for the proposed location. A copy of the report has been sent to the BLM office under separate cover.

M. CHEVRON REPRESENTATIVES

Project Manager Kelly Wojtasek 1400 Smith Street, 40095 Houston, TX 77002 Office: 713-372-9691 Kellyanne@chevron.com	**Drilling Engineer** Matt Kubachka 1400 Smith Street, 43128 Houston, TX 77002 Office: +1 (713) 372-5721 Matt.Kubachka@chevron.com
Surface Land Representative Stephen Tarr 15 Smith Road, 5103 Claydesta Plaza Midland, TX 79705 Office: +1 432-687-7956 Cell: +1 432-238-6316 STarr@chevron.com	**Facility Engineer** Jimmy Batton 15 Smith Road, 6216C Claydesta Plaza Midland, TX 79705 Office: +1 432-687-7648 KOJR@chevron.com
Geologist Terry Belsher 1400 Smith Street, 42196 Houston, TX 77002 Office: +1 (713) 372-3460 TBEL@chevron.com	**Asset Manager** David McKay 1400 Smith Street. 40188 Houston, TX 77002 DVMC@chevron.com
Regulatory Specialist Denise Pinkerton 15 Smith Road, 4229 Claydesta Plaza Midland, TX 79705 Office: +1 (432) 687-7375 leakejd@chevron.com	**Land Team Lead** Pam Bikun 1400 Smith Street. 45004 Houston, TX 77002 Office: 713-372-1373 PamBikun@Chevron.com

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHEVRON USA
LEASE NO.:	NM118714
WELL NAME & NO.:	1H-RUSTLER BLUFF 33 24 29 FED COM
SURFACE HOLE FOOTAGE:	225' FNL & 1980' FEL
BOTTOM HOLE FOOTAGE	330' FNL & 1980' FEL (T. 24,E., R. 29. S., Sec. 33)
LOCATION:	Section 4 T. 25 S., R. 29 E., NMPM
COUNTY:	EDDY COUNTY, NEW MEXICO

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Access Road Construction Requirements

1. *Low Water Crossing*
   A low water crossing shall be constructed on the access road where drainages/arroyos cross the road. A low water crossing must be constructed at the crossing of Wood Draw. The low water crossing shall be accomplished by dipping the road down to the bed of the drainage. Material moved from the banks of the crossing shall be stockpiled near the road edge. Gravel or cobble shall be used as the primary material for the road bed in the low water crossing.
2. *Cattle Guard*
   Where entry is granted across a fence line for the access road, the fence must be braced and tied off on both sides of the passageway with H-braces prior to cutting. Once the work is completed, the fence will be restored to its prior condition with an appropriately sized cattle guard sufficient to carry out the project. Any new or existing cattle guards on the access route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations. Once the road is abandoned, the fence would be restored to its prior condition, or better. The operator shall notify the private property owner or the grazing allotment holders prior to crossing any fences.

Livestock Water Pipeline Requirements

The access road, electric line, and production pipeline cross over a livestock water pipeline. The operator/contractor must contact the allotment holder prior to construction to identify the location of the livestock water pipeline. The livestock water pipeline will be identified with signage by the operator throughout the life of the well. The operator must take measures to protect the pipeline from compression or other damages. If the pipeline is damaged or compromised in any way near the proposed project as a result of oil and gas activity, the operator is responsible for repairing the pipeline immediately. The operator must notify the BLM office (575-234-5972) and the grazing allotment holder if any damage occurs to structures that provide water to livestock.

Frac Pond Requirements

Since the frac pond is located on state land, the operator must approval from the state to construct the frac pond. Since the frac pond is being constructed to service the proposed federal well, the following must be adhered to.

A copy of the application (APD) and attachments, including stipulations, survey plat and diagram, will be on location during construction. BLM personnel may request to see a copy of your permit during construction to ensure compliance with all conditions of approval.

Holder agrees to comply with the following conditions of approval to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this permit.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated.

3. Required Standard Conditions of Approval:

a. Notification
Contact the Supervisory Environmental Protection Specialist, Jim Amos, at 575-234-5909 at least 24 hours prior to starting construction.

b. Freshwater Only
The frac pond will only be authorized to contain freshwater and testing of water quality is required. Additives are not allowed without consent of the authorized officer in writing.

c. Contamination
If at any time the water in the frac pond becomes polluted with salts or other contaminants, use of the frac pond will cease and desist, and all liquids will be removed from the frac pond and disposed of properly. The operator will preclude releases of oil into open pits. The operator must remove any accumulation of oil, condensate, or contaminant in a pit within 48 hours of discovery.

d. Authorized Disturbance
Confine all construction and maintenance activity to the approved authorized area applied for in the application.

e. Facilities
Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations. Grey-water, sewage, and trash shall be removed from the site and disposed of properly at a state approved facility.

f. Escape Ramps
The operator will construct and maintain frac ponds to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in frac ponds. Escape ramps must be installed at every corner of the frac pond and in the center of each side if that side exceeds 100 feet in length. Escape ramps must be in contact with the side of the frac pond, bottom of the frac pond, and the top of the frac pond berm. Escape ramps cannot be made of metal and cannot be steeper than a 3:1 slope (Horizontal Distance: Vertical Distance) or 30% slope. (*Examples of escape ramps: 12" wide wooden planks wrapped in matting, felt lining, etc.*)

g. Frac Pond Pipelines
Temporary pipelines flowing from the frac pond to the target well will be laid along existing roadways unless an exception has been granted by the authorized officer in writing.

h. Mineral Material from Excavation

Mineral materials extracted during construction of the frac pond will be stored on-location and/or used for constructing the frac pond.

i. Frac Pond Liner
The frac pond will be lined with at least a 30 mil. plastic liner. The plastic lining will be removed prior to final abandonment.

j. Topsoil Stockpile
The operator shall strip at least the top 6 inches of soil (root zone) from the entire frac pond area and stockpile the topsoil approximately 25 feet outside the bermed perimeter of the pond in a low profile manner, reasonably protected from wind and water erosion. Topsoil shall not be used for constructing the frac pond. The topsoil will be used for final reclamation purposes only.

k. Frac Pond Fence
The operator will install and maintain exclosure fencing on all sides of the frac pond to prevent access to public, livestock, and large forms of wildlife. The fence shall be installed at the base of the berm and never on top of the berm. Construction of the fence shall consist of steel and/or wooden posts set firmly into natural ground. Hog panel or chain-link fencing must be used as the fence and tied securely to the fence posts. Barbed-wire fencing or electric fences shall not be used. The fence height shall not be shorter than six (6) feet. The erected fence shall be maintained in adequate condition until the frac pond is reclaimed.

l. Erosion Prevention
Install earthen erosion-control structures as are suitable for the specific terrain and soil conditions.

m. Reclamation Start
   I. Reclamation efforts will commence immediately after the frac pond is no longer needed for the purpose of completing wells.
   II. Within 3 months of completion of frac operations on associated wells, all earthwork and final reclamation must be completed. This includes reclaiming and/or removal of:
      i. Any roads approved for use with the pond
      ii. Surface water lines
      iii. Tanks, pumps, fencing etc.

Requirements for Operations and Final Reclamation:

4. If, during any phase of the construction, operation, maintenance, or termination of the frac pond, any pollutant should be released from the contaminated frac pond, the control and total removal, disposal, and cleaning up of such pollutant, wherever found, shall be the responsibility of holder, regardless of fault.

Upon failure of holder to control, dispose of, or clean up such discharge, or to repair all damages resulting there-from, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

6. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

7. After all disturbed areas have been satisfactorily contoured and prepared for seeding the location needs to be revegetated with the seed mixture provided. Seeding may need to be repeated until revegetation is successful. Operators shall contact Jim Amos, Supervisor, Environmental Protection – (575)234-5909, **prior** to beginning surface reclamation operations.

8. Seeding is required: Use the following seed mix.

( ) seed mixture 1	( ) seed mixture 3
(x) seed mixture 2	( ) seed mixture 4
( ) LPC mixture	( ) Aplomado Falcon mix

Communitization Agreement

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on both sides of the road.

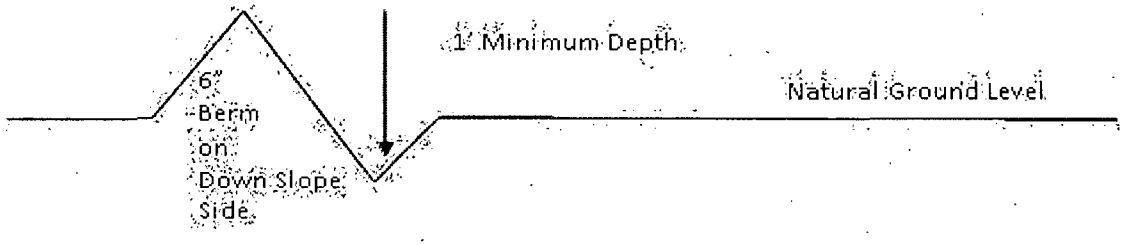
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

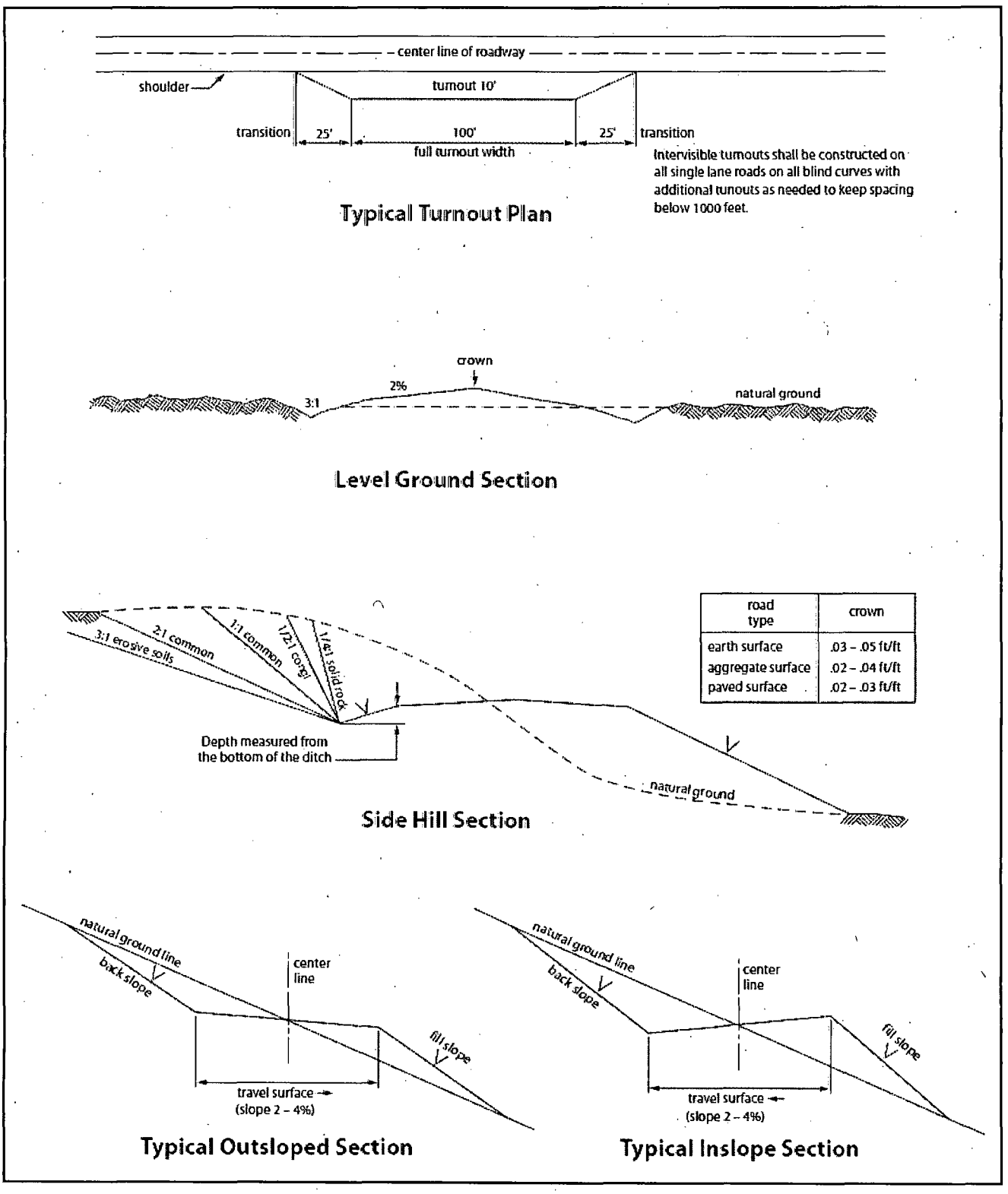


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

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

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

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

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

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

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

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#).

Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

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

Medium Cave/Karst
Possible water flows in the Castile and Delaware.
Possible lost circulation in the Salado, Delaware, and Bone Spring.

1. The **13-3/8** inch surface casing shall be set at approximately **500** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

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

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing, which shall be set at approximately **2900** feet, is:

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

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

The pilot hole plugging procedure is approved as written.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

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

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

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

    a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
    b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
    c. **Manufacturer representative shall install the test plug for the initial BOP test.**
    d. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
    e. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**

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

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

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

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

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

e. 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.**

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

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

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

CRW 091214

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures
Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the

largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to

repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be **30** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)

- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

( ) seed mixture 1	( ) seed mixture 3
(x) seed mixture 2	( ) seed mixture 4
( ) seed mixture 2/LPC	( ) Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches that are not otherwise fenced, screened, or netted to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the application (APD) and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
b. Activities of other parties including, but not limited to:
    (1) Land clearing.
    (2) Earth-disturbing and earth-moving work.

(3) Blasting.
(4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of **20** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline must be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline must be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity will be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on

public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

17. Surface pipelines must be less than or equal to 4 inches and a working pressure below 125 psi.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the approved application and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The

holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed