

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS
*Do not use this form for proposals to drill or to re-enter an
abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	APR 14 2008	5. Lease Serial No NM-0556811
2. Name of Operator Cimarex Energy Co. of Colorado	OCD-ARTESIA	6. If Indian, Allottee or Tribe Name
3a. Address PO Box 140907; Irving, TX 75014-0907	3b. Phone No. (include area code) 972-401-3111	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL 925' FNL & 330' FWL, BHL 375' FNL & 330' FEL 11-16S-29E		8. Well Name and No. Nitro 11 Federal No. 2
		9. API Well No. 30-015- 36100
		10. Field and Pool, or Exploratory Area County Line Tank; Abo
		11. County or Parish, State Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other <u>Change Location</u>
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Cimarex has changed its locations, both SHL and BHL, for the proposed Nitro 11 Federal No. 2 well.

Old Location

SHL 925' FNL & 330' FWL
BHL 375' FNL & 330' FEL
11-16S-29E

New Location

SHL 375' FNL & 660' FEL
BHL 375' FNL & 330' FWL
11-16S-29E

Please see attached revised plats and revised preliminary directional survey.

**If earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.**

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Natalie Krueger	Title Regulatory Analyst
Signature 	Date February 20, 2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /s/ Don Peterson	Title FIELD MANAGER	Date APR 10 2008
Conditions of Approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office CARLSBAD FIELD OFFICE	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

DISTRICT I
1626 N. French Dr., Hobbs, NM 88240

DISTRICT II
1901 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 97197	Pool Name County Line Tank; Abo
Property Code 35578	Property Name NITRO "11" FEDERAL	Well Number 2
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3735'

Surface Location

UL or lot No. A	Section 11	Township 16 S	Range 29 E	Lot Idn	Feet from the 375	North/South line NORTH	Feet from the 660	East/West line EAST	County EDDY
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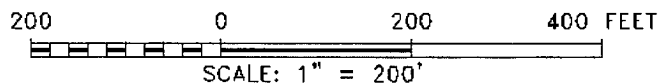
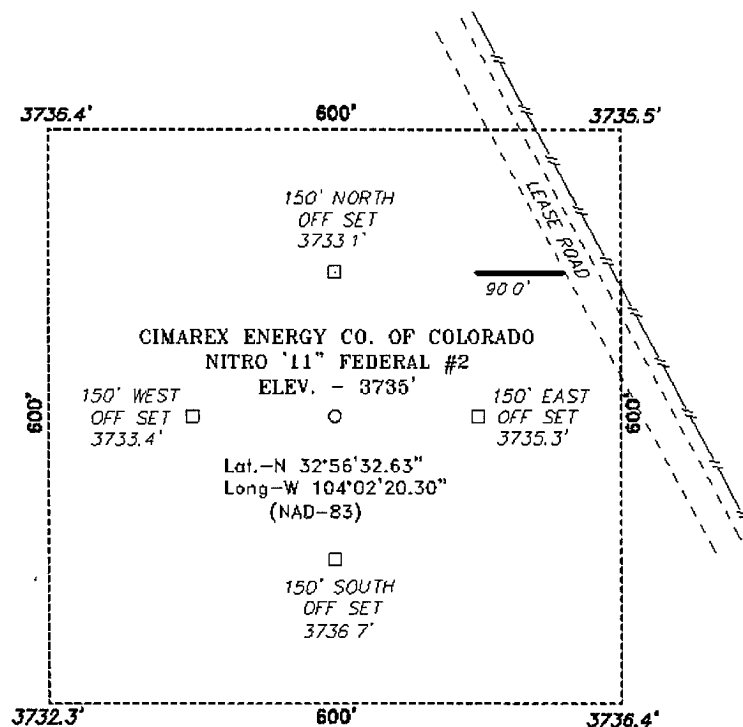
Bottom Hole Location If Different From Surface

UL or lot No. D	Section 11	Township 16 S	Range 29 E	Lot Idn	Feet from the 375	North/South line NORTH	Feet from the 330	East/West line WEST	County EDDY
Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.						

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

		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 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. <i>Zeno Farris</i> 02-20-08 Signature Date Zeno Farris Printed Name
NM-0556811		
BOTTOM HOLE LOCATION Lat - N32°56'32.75" Long - W104°03'10.87" NMSPCE- N 706705.325 E 627331.343 (NAD-83)	SURFACE LOCATION Lat - N32°56'32.63" Long - W104°02'20.30" NMSPCE- N 706705.6 E 631640.6 (NAD-83)	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. FEBRUARY 06, 2008 Date Surveyed <i>GARY L. JONES</i> Signature Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS

SECTION 11, TOWNSHIP 16 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM LOCO HILLS, GO NORTH 7.5 MILES TO LEASE ROAD. ON LEASE ROAD GO WEST 2.7 MILES TO LEASE ROAD, ON LEASE ROAD GO NORTHWEST 1.2 MILES TO PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 19124 Drawn By: J. SMALL

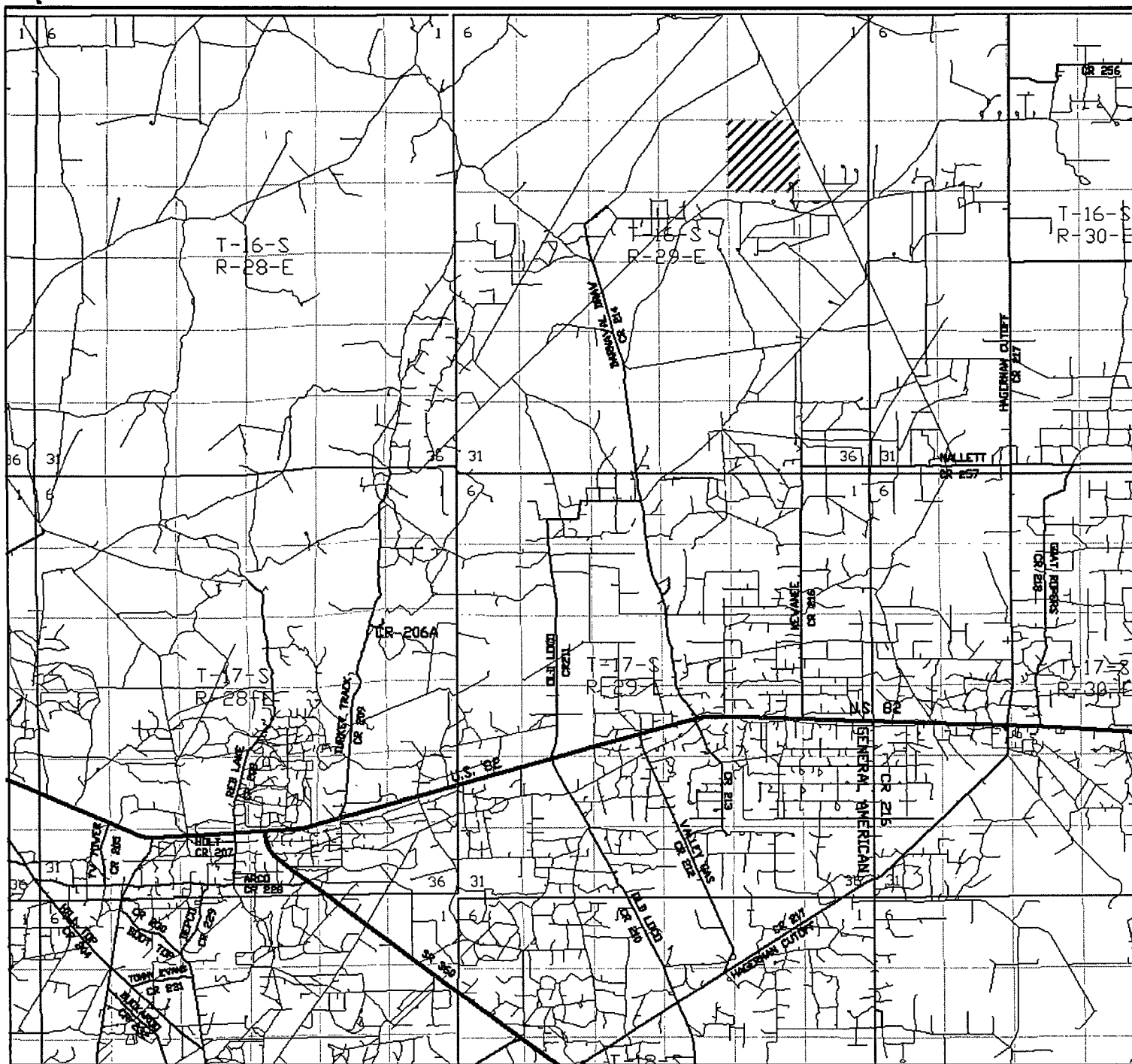
Date: 02-13-2008 Disk: JMS 19124W

CIMAREX ENERGY CO. OF COLORADO

REF. NITRO "11" FEDERAL COM #2 / WELL PAD TOPO

THE NITRO "11" FEDERAL COM #2 LOCATED 375'
FROM THE NORTH LINE AND 660' FROM THE EAST LINE OF
SECTION 11, TOWNSHIP 16 SOUTH, RANGE 29 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 02-06-2008 Sheet 1 of 1 Sheets



NITRO "11" FEDERAL #2

Located 375' FNL and 660' FEL

Section 11, Township 16 South, Range 29 East,
N.M.P.M., Eddy County, New Mexico.

basin
surveys
focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number: JMS 19124TR

Survey Date: 02-06-2008

Scale: 1" = 2 MILES

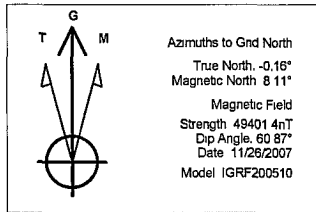
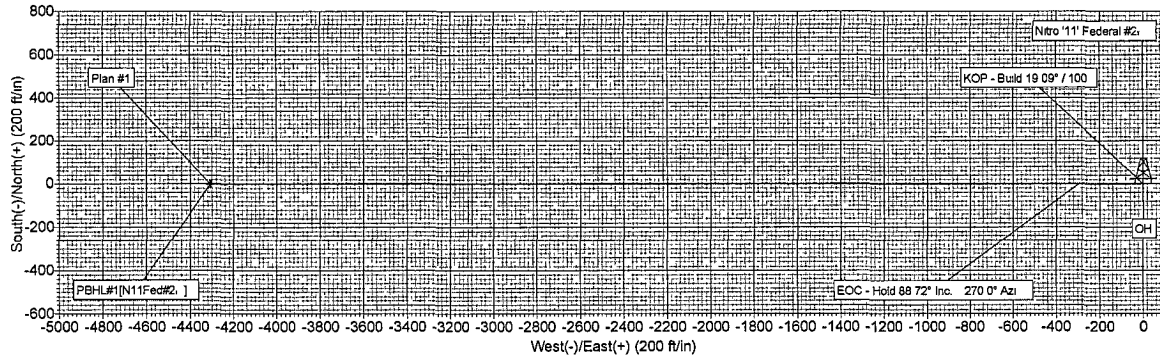
Date: 02-13-2008

CIMAREX
ENERGY CO.
OF COLORADO

CIMAREX
ENERGY CO.
OF COLORADO

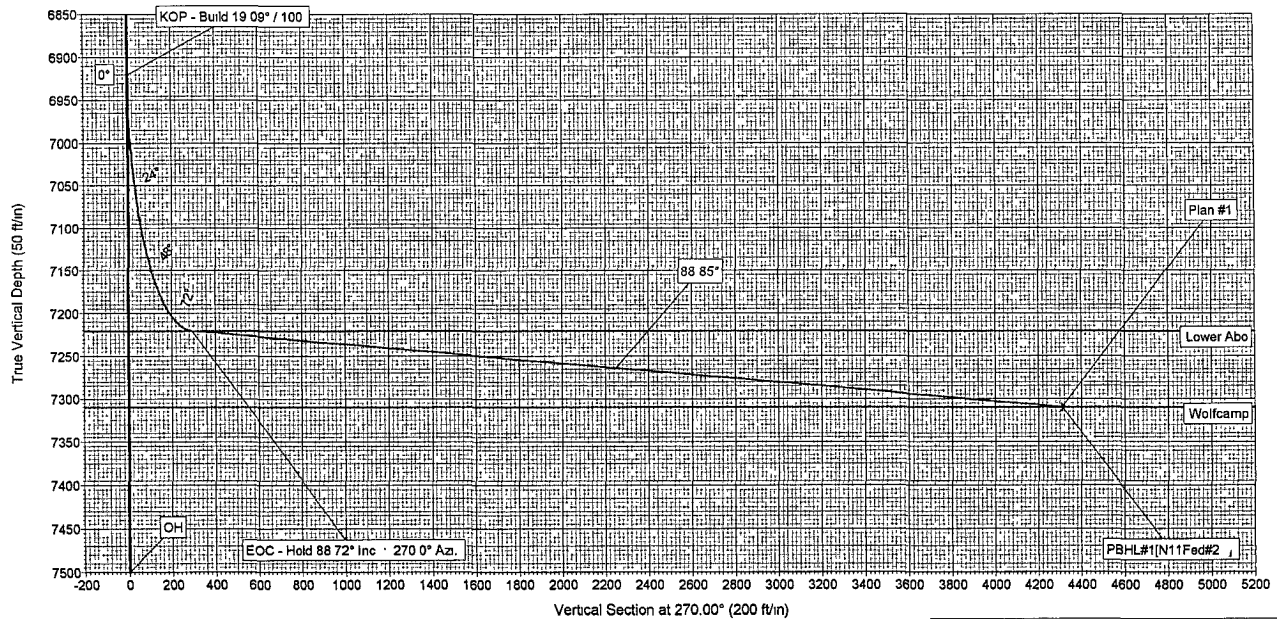


Project: Eddy Co., New Mexico
 Site: Nitro '11' Federal #2
 Well: Nitro '11' Federal #2
 Wellbore: Lateral
 Plan: Plan #1 (Nitro '11' Federal #2 Lateral)



PROJECT DETAILS Eddy Co., New Mexico
 Geodetic System US State Plane 1983
 Datum North American Datum 1983
 Ellipsoid GRS 1980
 Zone New Mexico Eastern Zone
 System Datum Mean Sea Level

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	DLeg	TFace	VSec	Target
1	6920.00	0.00	0.00	6920.00	0.00	0.00	0.00	0.00	0.00	
2	7384.65	88.72	270.00	7220.00	0.00	-293.37	19.09	270.00	293.37	
3	11401.57	88.72	270.00	7309.73	0.00	-4309.29	0.00	0.00	4309.29	PBHL#1[N11Fed#2]



Plan Plan #1 (Nitro '11' Federal #2 Lateral)
 Created By: L.D. Burton Date: February 20, 2007



Cimarex Energy Co., Inc.

Eddy Co., New Mexico

Nitro '11' Federal #2

Nitro '11' Federal #2

Lateral

Plan: Plan #1

Standard Survey Report

20 February, 2008





Black Viper Energy
Survey Report



Company:	Cimarex Energy Co., Inc	Local Co-ordinate Reference:	Well Nitro '11' Federal #2
Project:	Eddy Co., New Mexico	TVD Reference:	WELL @ 3718.00ft (Original Well Elev)
Site:	Nitro '11' Federal #2	MD Reference:	WELL @ 3718.00ft (Original Well Elev)
Well:	Nitro '11' Federal #2	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003.14 1.0 Server DB

Project:	Eddy Co., New Mexico		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Nitro '11' Federal #2			
Site Position:		Northing:	706,705.60 ft	Latitude:	32° 56' 32.619 N
From:	Map	Easting:	631,640.60 ft	Longitude:	104° 2' 20.313 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.16 °

Well:	Nitro '11' Federal #2					
Well Position	+N/-S	0 00 ft	Northing:	706,705.60 ft	Latitude:	32° 56' 32.619 N
	+E/-W	0 00 ft	Easting:	631,640.60 ft	Longitude:	104° 2' 20.313 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,718 00 ft

Wellbore:	Lateral				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	11/26/2007	8.27	60.87	49,401

Design		Plan #1			
Audit Notes:					
Version:	ZERO	Phase:	PROTOTYPE	Tie On Depth:	6,920.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	270.00	

Survey Tool Program	Date: 02/20/2008				
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
6,920.00	11,401.57	Plan #1 (Lateral)	MWD	MWD - Standard	

Planned Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate	
(ft)			(ft)			(ft)	(%/100ft)	(%/100ft)	(%/100ft)	
6,920.00	0.00	0.00	6,920.00	0.00	0.00	0.00	0.00	0.00	0.00	
KOP - Build 19.09° / 100										
6,925.00	0.95	270.00	6,925.00	0.00	-0.04	0.04	19.09	19.09	0.00	
6,950.00	5.73	270.00	6,949.95	0.00	-1.50	1.50	19.09	19.09	0.00	
6,975.00	10.50	270.00	6,974.69	0.00	-5.03	5.03	19.09	19.09	0.00	
7,000.00	15.28	270.00	6,999.06	0.00	-10.60	10.60	19.09	19.09	0.00	
7,025.00	20.05	270.00	7,022.87	0.00	-18.18	18.18	19.09	19.09	0.00	
7,050.00	24.82	270.00	7,045.97	0.00	-27.72	27.72	19.09	19.09	0.00	
7,075.00	29.60	270.00	7,068.20	0.00	-39.15	39.15	19.09	19.09	0.00	
7,100.00	34.37	270.00	7,089.40	0.00	-52.39	52.39	19.09	19.09	0.00	
7,125.00	39.14	270.00	7,109.42	0.00	-67.34	67.34	19.09	19.09	0.00	
7,150.00	43.92	270.00	7,128.13	0.00	-83.91	83.91	19.09	19.09	0.00	
7,175.00	48.69	270.00	7,145.40	0.00	-101.98	101.98	19.09	19.09	0.00	



Black Viper Energy
Survey Report



Company:	Cimarex Energy Co., Inc.	Local Co-ordinate Reference:	Well Nitro '11' Federal #2
Project:	Eddy Co., New Mexico	TVD Reference:	WELL @ 3718.00ft (Original Well Elev)
Site:	Nitro '11' Federal #2	MD Reference:	WELL @ 3718.00ft (Original Well Elev)
Well:	Nitro '11' Federal #2	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003.14.1-0 Server DB

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,200.00	53.46	270.00	7,161.10	0.00	-121.43	121.43	19.09	19.09	0.00
7,225.00	58.24	270.00	7,175.13	0.00	-142.11	142.11	19.09	19.09	0.00
7,250.00	63.01	270.00	7,187.39	0.00	-163.89	163.89	19.09	19.09	0.00
7,275.00	67.78	270.00	7,197.80	0.00	-186.61	186.61	19.09	19.09	0.00
7,300.00	72.56	270.00	7,206.28	0.00	-210.12	210.12	19.09	19.09	0.00
7,325.00	77.33	270.00	7,212.77	0.00	-234.26	234.26	19.09	19.09	0.00
7,350.00	82.10	270.00	7,217.23	0.00	-258.85	258.85	19.09	19.09	0.00
7,375.00	86.88	270.00	7,219.63	0.00	-283.73	283.73	19.09	19.09	0.00
7,384.65	88.72	270.00	7,220.00	0.00	-293.37	293.37	19.09	19.09	0.00
EOC - Hold 88.72° Inc. :: 270.0° Azi. - Lower Abo									
7,400.00	88.72	270.00	7,220.34	0.00	-308.72	308.72	0.00	0.00	0.00
7,500.00	88.72	270.00	7,222.58	0.00	-408.69	408.69	0.00	0.00	0.00
7,600.00	88.72	270.00	7,224.81	0.00	-508.67	508.67	0.00	0.00	0.00
7,700.00	88.72	270.00	7,227.04	0.00	-608.64	608.64	0.00	0.00	0.00
7,800.00	88.72	270.00	7,229.28	0.00	-708.62	708.62	0.00	0.00	0.00
7,900.00	88.72	270.00	7,231.51	0.00	-808.59	808.59	0.00	0.00	0.00
8,000.00	88.72	270.00	7,233.75	0.00	-908.57	908.57	0.00	0.00	0.00
8,100.00	88.72	270.00	7,235.98	0.00	-1,008.54	1,008.54	0.00	0.00	0.00
8,200.00	88.72	270.00	7,238.21	0.00	-1,108.52	1,108.52	0.00	0.00	0.00
8,300.00	88.72	270.00	7,240.45	0.00	-1,208.49	1,208.49	0.00	0.00	0.00
8,400.00	88.72	270.00	7,242.68	0.00	-1,308.47	1,308.47	0.00	0.00	0.00
8,500.00	88.72	270.00	7,244.92	0.00	-1,408.44	1,408.44	0.00	0.00	0.00
8,600.00	88.72	270.00	7,247.15	0.00	-1,508.42	1,508.42	0.00	0.00	0.00
8,700.00	88.72	270.00	7,249.38	0.00	-1,608.39	1,608.39	0.00	0.00	0.00
8,800.00	88.72	270.00	7,251.62	0.00	-1,708.37	1,708.37	0.00	0.00	0.00
8,900.00	88.72	270.00	7,253.85	0.00	-1,808.34	1,808.34	0.00	0.00	0.00
9,000.00	88.72	270.00	7,256.08	0.00	-1,908.32	1,908.32	0.00	0.00	0.00
9,100.00	88.72	270.00	7,258.32	0.00	-2,008.29	2,008.29	0.00	0.00	0.00
9,200.00	88.72	270.00	7,260.55	0.00	-2,108.27	2,108.27	0.00	0.00	0.00
9,300.00	88.72	270.00	7,262.79	0.00	-2,208.24	2,208.24	0.00	0.00	0.00
9,400.00	88.72	270.00	7,265.02	0.00	-2,308.22	2,308.22	0.00	0.00	0.00
9,500.00	88.72	270.00	7,267.25	0.00	-2,408.19	2,408.19	0.00	0.00	0.00
9,600.00	88.72	270.00	7,269.49	0.00	-2,508.17	2,508.17	0.00	0.00	0.00
9,700.00	88.72	270.00	7,271.72	0.00	-2,608.14	2,608.14	0.00	0.00	0.00
9,800.00	88.72	270.00	7,273.95	0.00	-2,708.12	2,708.12	0.00	0.00	0.00
9,900.00	88.72	270.00	7,276.19	0.00	-2,808.09	2,808.09	0.00	0.00	0.00
10,000.00	88.72	270.00	7,278.42	0.00	-2,908.07	2,908.07	0.00	0.00	0.00
10,100.00	88.72	270.00	7,280.66	0.00	-3,008.04	3,008.04	0.00	0.00	0.00
10,200.00	88.72	270.00	7,282.89	0.00	-3,108.02	3,108.02	0.00	0.00	0.00
10,300.00	88.72	270.00	7,285.12	0.00	-3,207.99	3,207.99	0.00	0.00	0.00
10,400.00	88.72	270.00	7,287.36	0.00	-3,307.97	3,307.97	0.00	0.00	0.00
10,500.00	88.72	270.00	7,289.59	0.00	-3,407.94	3,407.94	0.00	0.00	0.00
10,600.00	88.72	270.00	7,291.83	0.00	-3,507.92	3,507.92	0.00	0.00	0.00
10,700.00	88.72	270.00	7,294.06	0.00	-3,607.89	3,607.89	0.00	0.00	0.00
10,800.00	88.72	270.00	7,296.29	0.00	-3,707.87	3,707.87	0.00	0.00	0.00
10,900.00	88.72	270.00	7,298.53	0.00	-3,807.84	3,807.84	0.00	0.00	0.00
11,000.00	88.72	270.00	7,300.76	0.00	-3,907.82	3,907.82	0.00	0.00	0.00
11,100.00	88.72	270.00	7,302.99	0.00	-4,007.79	4,007.79	0.00	0.00	0.00
11,200.00	88.72	270.00	7,305.23	0.00	-4,107.77	4,107.77	0.00	0.00	0.00
11,300.00	88.72	270.00	7,307.46	0.00	-4,207.74	4,207.74	0.00	0.00	0.00
11,401.57	88.72	270.00	7,309.73	0.00	-4,309.29	4,309.29	0.00	0.00	0.00
PBHL#1[N11Fed#2]									



Black Viper Energy
Survey Report



Company:	Cimarex Energy Co., Inc.	Local Co-ordinate Reference:	Well Nitro '11' Federal #2:
Project:	Eddy Co., New Mexico	TVD Reference:	WELL @ 3718.00ft (Original Well Elev)
Site:	Nitro '11' Federal #2	MD Reference:	WELL @ 3718.00ft (Original Well Elev)
Well:	Nitro '11' Federal #2	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003.14.1.0 Server DB

Targets									
Target Name	hit/miss target	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting	
Shape		(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	
PBHL#1[N11Fed#2']		0.00	0.00	7,310.00	-0.28	-4,309.26	706,705.33	627,331.34	
	- plan hits target								
	- Point								

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
	2,700.00	San Andres		0.00		
	6,195.00	Abo Shale		0.00		
7,384.65	7,220.00	Lower Abo		0.00		
	7,320.00	Wolfcamp		0.00		

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)		
6,920.00	6,920.00	0.00	0.00	KOP - Build 19.09° / 100	
7,384.65	7,220.00	0.00	-293.37	EOC - Hold 88.72° Inc. :: 270 0° Azi.	

Checked By: _____ Approved By: _____ Date: _____

Nitro 11 Federal #2 Lateral Plan #1

Cimarex Energy Co., Inc.
Nitro '11' Federal #2 - Plan #1

Eddy Co., New Mexico
Nitro '11' Federal #2

Measured Dogleg Depth Rate (ft) (°/100ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)
6920.00	0.000	0.000	6920.00	0.00 N	0.00 E	0.00
0.00						
6930.00	1.909	270.000	6930.00	0.00 N	0.17 W	0.17
19.09						
6940.00	3.819	270.000	6939.99	0.00 N	0.67 W	0.67
19.09						
6950.00	5.728	270.000	6949.95	0.00 N	1.50 W	1.50
19.09						
6960.00	7.638	270.000	6959.88	0.00 N	2.66 W	2.66
19.09						
6970.00	9.547	270.000	6969.77	0.00 N	4.16 W	4.16
19.09						
6980.00	11.456	270.000	6979.60	0.00 N	5.98 W	5.98
19.09						
6990.00	13.366	270.000	6989.37	0.00 N	8.13 W	8.13
19.09						
7000.00	15.275	270.000	6999.06	0.00 N	10.60 W	10.60
19.09						
7010.00	17.184	270.000	7008.66	0.00 N	13.40 W	13.40
19.09						
7020.00	19.094	270.000	7018.16	0.00 N	16.51 W	16.51
19.09						
7030.00	21.003	270.000	7027.55	0.00 N	19.94 W	19.94
19.09						
7040.00	22.913	270.000	7036.83	0.00 N	23.68 W	23.68
19.09						
7050.00	24.822	270.000	7045.97	0.00 N	27.72 W	27.72
19.09						
7060.00	26.731	270.000	7054.98	0.00 N	32.07 W	32.07
19.09						
7070.00	28.641	270.000	7063.83	0.00 N	36.72 W	36.72
19.09						
7080.00	30.550	270.000	7072.53	0.00 N	41.65 W	41.65
19.09						
7090.00	32.460	270.000	7081.05	0.00 N	46.88 W	46.88
19.09						
7100.00	34.369	270.000	7089.40	0.00 N	52.39 W	52.39
19.09						
7110.00	36.278	270.000	7097.56	0.00 N	58.17 W	58.17
19.09						
7120.00	38.188	270.000	7105.52	0.00 N	64.22 W	64.22
19.09						
7130.00	40.097	270.000	7113.27	0.00 N	70.53 W	70.53
19.09						
7140.00	42.006	270.000	7120.81	0.00 N	77.10 W	77.10
19.09						
7150.00	43.916	270.000	7128.13	0.00 N	83.91 W	83.91
19.09						
7160.00	45.825	270.000	7135.22	0.00 N	90.97 W	90.97
19.09						

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7170.00	47.735	270.000	7142.07	0.00 N	98.25 W	98.25
19.09						
7180.00	49.644	270.000	7148.67	0.00 N	105.77 W	105.77
19.09						
7190.00	51.553	270.000	7155.01	0.00 N	113.49 W	113.49
19.09						
7200.00	53.463	270.000	7161.10	0.00 N	121.43 W	121.43
19.09						
7210.00	55.372	270.000	7166.92	0.00 N	129.56 W	129.56
19.09						
7220.00	57.281	270.000	7172.46	0.00 N	137.88 W	137.88
19.09						
7230.00	59.191	270.000	7177.73	0.00 N	146.38 W	146.38
19.09						
7240.00	61.100	270.000	7182.71	0.00 N	155.06 W	155.06
19.09						
7250.00	63.010	270.000	7187.39	0.00 N	163.89 W	163.89
19.09						
7260.00	64.919	270.000	7191.78	0.00 N	172.87 W	172.87
19.09						
7270.00	66.828	270.000	7195.87	0.00 N	182.00 W	182.00
19.09						
7280.00	68.738	270.000	7199.65	0.00 N	191.26 W	191.26
19.09						
7290.00	70.647	270.000	7203.12	0.00 N	200.63 W	200.63
19.09						
7300.00	72.557	270.000	7206.28	0.00 N	210.12 W	210.12
19.09						
7310.00	74.466	270.000	7209.11	0.00 N	219.71 W	219.71
19.09						
7320.00	76.375	270.000	7211.63	0.00 N	229.39 W	229.39
19.09						
7330.00	78.285	270.000	7213.82	0.00 N	239.15 W	239.15
19.09						
7340.00	80.194	270.000	7215.69	0.00 N	248.97 W	248.97
19.09						
7350.00	82.103	270.000	7217.23	0.00 N	258.85 W	258.85
19.09						
7360.00	84.013	270.000	7218.44	0.00 N	268.78 W	268.78
19.09						
7370.00	85.922	270.000	7219.32	0.00 N	278.74 W	278.74
19.09						
7380.00	87.832	270.000	7219.86	0.00 N	288.72 W	288.72
19.09						
7390.00	88.720	270.000	7220.12	0.00 N	298.72 W	298.72
8.88						
7400.00	88.720	270.000	7220.34	0.00 N	308.72 W	308.72
0.00						
7410.00	88.720	270.000	7220.57	0.00 N	318.71 W	318.71
0.00						
7420.00	88.720	270.000	7220.79	0.00 N	328.71 W	328.71
0.00						
7430.00	88.720	270.000	7221.01	0.00 N	338.71 W	338.71
0.00						
7440.00	88.720	270.000	7221.24	0.00 N	348.71 W	348.71
0.00						
7450.00	88.720	270.000	7221.46	0.00 N	358.70 W	358.70
0.00						
7460.00	88.720	270.000	7221.68	0.00 N	368.70 W	368.70
0.00						
7470.00	88.720	270.000	7221.91	0.00 N	378.70 W	378.70
0.00						
7480.00	88.720	270.000	7222.13	0.00 N	388.70 W	388.70

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0.00						
7490.00	88.720	270.000	7222.35	0.00 N	398.69 W	398.69
0.00						
7500.00	88.720	270.000	7222.58	0.00 N	408.69 W	408.69
0.00						
7510.00	88.720	270.000	7222.80	0.00 N	418.69 W	418.69
0.00						
7520.00	88.720	270.000	7223.02	0.00 N	428.69 W	428.69
0.00						
7530.00	88.720	270.000	7223.25	0.00 N	438.68 W	438.68
0.00						
7540.00	88.720	270.000	7223.47	0.00 N	448.68 W	448.68
0.00						
7550.00	88.720	270.000	7223.69	0.00 N	458.68 W	458.68
0.00						
7560.00	88.720	270.000	7223.92	0.00 N	468.68 W	468.68
0.00						
7570.00	88.720	270.000	7224.14	0.00 N	478.67 W	478.67
0.00						
7580.00	88.720	270.000	7224.36	0.00 N	488.67 W	488.67
0.00						
7590.00	88.720	270.000	7224.59	0.00 N	498.67 W	498.67
0.00						
7600.00	88.720	270.000	7224.81	0.00 N	508.67 W	508.67
0.00						
7610.00	88.720	270.000	7225.03	0.00 N	518.66 W	518.66
0.00						
7620.00	88.720	270.000	7225.26	0.00 N	528.66 W	528.66
0.00						
7630.00	88.720	270.000	7225.48	0.00 N	538.66 W	538.66
0.00						
7640.00	88.720	270.000	7225.70	0.00 N	548.66 W	548.66
0.00						
7650.00	88.720	270.000	7225.93	0.00 N	558.65 W	558.65
0.00						
7660.00	88.720	270.000	7226.15	0.00 N	568.65 W	568.65
0.00						
7670.00	88.720	270.000	7226.37	0.00 N	578.65 W	578.65
0.00						
7680.00	88.720	270.000	7226.60	0.00 N	588.65 W	588.65
0.00						
7690.00	88.720	270.000	7226.82	0.00 N	598.64 W	598.64
0.00						
7700.00	88.720	270.000	7227.04	0.00 N	608.64 W	608.64
0.00						
7710.00	88.720	270.000	7227.27	0.00 N	618.64 W	618.64
0.00						
7720.00	88.720	270.000	7227.49	0.00 N	628.64 W	628.64
0.00						
7730.00	88.720	270.000	7227.71	0.00 N	638.63 W	638.63
0.00						
7740.00	88.720	270.000	7227.94	0.00 N	648.63 W	648.63
0.00						
7750.00	88.720	270.000	7228.16	0.00 N	658.63 W	658.63
0.00						
7760.00	88.720	270.000	7228.38	0.00 N	668.63 W	668.63
0.00						
7770.00	88.720	270.000	7228.61	0.00 N	678.62 W	678.62
0.00						
7780.00	88.720	270.000	7228.83	0.00 N	688.62 W	688.62
0.00						
7790.00	88.720	270.000	7229.05	0.00 N	698.62 W	698.62
0.00						

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7800.00	88.720	270.000	7229.28	0.00 N	708.62 W	708.62
0.00						
7810.00	88.720	270.000	7229.50	0.00 N	718.61 W	718.61
0.00						
7820.00	88.720	270.000	7229.72	0.00 N	728.61 W	728.61
0.00						
7830.00	88.720	270.000	7229.95	0.00 N	738.61 W	738.61
0.00						
7840.00	88.720	270.000	7230.17	0.00 N	748.61 W	748.61
0.00						
7850.00	88.720	270.000	7230.40	0.00 N	758.60 W	758.60
0.00						
7860.00	88.720	270.000	7230.62	0.00 N	768.60 W	768.60
0.00						
7870.00	88.720	270.000	7230.84	0.00 N	778.60 W	778.60
0.00						
7880.00	88.720	270.000	7231.07	0.00 N	788.60 W	788.60
0.00						
7890.00	88.720	270.000	7231.29	0.00 N	798.59 W	798.59
0.00						
7900.00	88.720	270.000	7231.51	0.00 N	808.59 W	808.59
0.00						
7910.00	88.720	270.000	7231.74	0.00 N	818.59 W	818.59
0.00						
7920.00	88.720	270.000	7231.96	0.00 N	828.59 W	828.59
0.00						
7930.00	88.720	270.000	7232.18	0.00 N	838.58 W	838.58
0.00						
7940.00	88.720	270.000	7232.41	0.00 N	848.58 W	848.58
0.00						
7950.00	88.720	270.000	7232.63	0.00 N	858.58 W	858.58
0.00						
7960.00	88.720	270.000	7232.85	0.00 N	868.58 W	868.58
0.00						
7970.00	88.720	270.000	7233.08	0.00 N	878.57 W	878.57
0.00						
7980.00	88.720	270.000	7233.30	0.00 N	888.57 W	888.57
0.00						
7990.00	88.720	270.000	7233.52	0.00 N	898.57 W	898.57
0.00						
8000.00	88.720	270.000	7233.75	0.00 N	908.57 W	908.57
0.00						
8010.00	88.720	270.000	7233.97	0.00 N	918.56 W	918.56
0.00						
8020.00	88.720	270.000	7234.19	0.00 N	928.56 W	928.56
0.00						
8030.00	88.720	270.000	7234.42	0.00 N	938.56 W	938.56
0.00						
8040.00	88.720	270.000	7234.64	0.00 N	948.56 W	948.56
0.00						
8050.00	88.720	270.000	7234.86	0.00 N	958.55 W	958.55
0.00						
8060.00	88.720	270.000	7235.09	0.00 N	968.55 W	968.55
0.00						
8070.00	88.720	270.000	7235.31	0.00 N	978.55 W	978.55
0.00						
8080.00	88.720	270.000	7235.53	0.00 N	988.55 W	988.55
0.00						
8090.00	88.720	270.000	7235.76	0.00 N	998.54 W	998.54
0.00						
8100.00	88.720	270.000	7235.98	0.00 N	1008.54 W	1008.54
0.00						
8110.00	88.720	270.000	7236.20	0.00 N	1018.54 W	1018.54

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0.00						
8120.00	88.720	270.000	7236.43	0.00 N	1028.54 W	1028.54
0.00						
8130.00	88.720	270.000	7236.65	0.00 N	1038.53 W	1038.53
0.00						
8140.00	88.720	270.000	7236.87	0.00 N	1048.53 W	1048.53
0.00						
8150.00	88.720	270.000	7237.10	0.00 N	1058.53 W	1058.53
0.00						
8160.00	88.720	270.000	7237.32	0.00 N	1068.53 W	1068.53
0.00						
8170.00	88.720	270.000	7237.54	0.00 N	1078.52 W	1078.52
0.00						
8180.00	88.720	270.000	7237.77	0.00 N	1088.52 W	1088.52
0.00						
8190.00	88.720	270.000	7237.99	0.00 N	1098.52 W	1098.52
0.00						
8200.00	88.720	270.000	7238.21	0.00 N	1108.52 W	1108.52
0.00						
8210.00	88.720	270.000	7238.44	0.00 N	1118.51 W	1118.51
0.00						
8220.00	88.720	270.000	7238.66	0.00 N	1128.51 W	1128.51
0.00						
8230.00	88.720	270.000	7238.88	0.00 N	1138.51 W	1138.51
0.00						
8240.00	88.720	270.000	7239.11	0.00 N	1148.51 W	1148.51
0.00						
8250.00	88.720	270.000	7239.33	0.00 N	1158.50 W	1158.50
0.00						
8260.00	88.720	270.000	7239.55	0.00 N	1168.50 W	1168.50
0.00						
8270.00	88.720	270.000	7239.78	0.00 N	1178.50 W	1178.50
0.00						
8280.00	88.720	270.000	7240.00	0.00 N	1188.50 W	1188.50
0.00						
8290.00	88.720	270.000	7240.22	0.00 N	1198.49 W	1198.49
0.00						
8300.00	88.720	270.000	7240.45	0.00 N	1208.49 W	1208.49
0.00						
8310.00	88.720	270.000	7240.67	0.00 N	1218.49 W	1218.49
0.00						
8320.00	88.720	270.000	7240.89	0.00 N	1228.49 W	1228.49
0.00						
8330.00	88.720	270.000	7241.12	0.00 N	1238.48 W	1238.48
0.00						
8340.00	88.720	270.000	7241.34	0.00 N	1248.48 W	1248.48
0.00						
8350.00	88.720	270.000	7241.56	0.00 N	1258.48 W	1258.48
0.00						
8360.00	88.720	270.000	7241.79	0.00 N	1268.48 W	1268.48
0.00						
8370.00	88.720	270.000	7242.01	0.00 N	1278.47 W	1278.47
0.00						
8380.00	88.720	270.000	7242.23	0.00 N	1288.47 W	1288.47
0.00						
8390.00	88.720	270.000	7242.46	0.00 N	1298.47 W	1298.47
0.00						
8400.00	88.720	270.000	7242.68	0.00 N	1308.47 W	1308.47
0.00						
8410.00	88.720	270.000	7242.90	0.00 N	1318.46 W	1318.46
0.00						
8420.00	88.720	270.000	7243.13	0.00 N	1328.46 W	1328.46
0.00						

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8430.00	88.720	270.000	7243.35	0.00 N	1338.46 W	1338.46
0.00						
8440.00	88.720	270.000	7243.57	0.00 N	1348.46 W	1348.46
0.00						
8450.00	88.720	270.000	7243.80	0.00 N	1358.45 W	1358.45
0.00						
8460.00	88.720	270.000	7244.02	0.00 N	1368.45 W	1368.45
0.00						
8470.00	88.720	270.000	7244.24	0.00 N	1378.45 W	1378.45
0.00						
8480.00	88.720	270.000	7244.47	0.00 N	1388.45 W	1388.45
0.00						
8490.00	88.720	270.000	7244.69	0.00 N	1398.44 W	1398.44
0.00						
8500.00	88.720	270.000	7244.92	0.00 N	1408.44 W	1408.44
0.00						
8510.00	88.720	270.000	7245.14	0.00 N	1418.44 W	1418.44
0.00						
8520.00	88.720	270.000	7245.36	0.00 N	1428.44 W	1428.44
0.00						
8530.00	88.720	270.000	7245.59	0.00 N	1438.43 W	1438.43
0.00						
8540.00	88.720	270.000	7245.81	0.00 N	1448.43 W	1448.43
0.00						
8550.00	88.720	270.000	7246.03	0.00 N	1458.43 W	1458.43
0.00						
8560.00	88.720	270.000	7246.26	0.00 N	1468.43 W	1468.43
0.00						
8570.00	88.720	270.000	7246.48	0.00 N	1478.42 W	1478.42
0.00						
8580.00	88.720	270.000	7246.70	0.00 N	1488.42 W	1488.42
0.00						
8590.00	88.720	270.000	7246.93	0.00 N	1498.42 W	1498.42
0.00						
8600.00	88.720	270.000	7247.15	0.00 N	1508.42 W	1508.42
0.00						
8610.00	88.720	270.000	7247.37	0.00 N	1518.41 W	1518.41
0.00						
8620.00	88.720	270.000	7247.60	0.00 N	1528.41 W	1528.41
0.00						
8630.00	88.720	270.000	7247.82	0.00 N	1538.41 W	1538.41
0.00						
8640.00	88.720	270.000	7248.04	0.00 N	1548.41 W	1548.41
0.00						
8650.00	88.720	270.000	7248.27	0.00 N	1558.40 W	1558.40
0.00						
8660.00	88.720	270.000	7248.49	0.00 N	1568.40 W	1568.40
0.00						
8670.00	88.720	270.000	7248.71	0.00 N	1578.40 W	1578.40
0.00						
8680.00	88.720	270.000	7248.94	0.00 N	1588.40 W	1588.40
0.00						
8690.00	88.720	270.000	7249.16	0.00 N	1598.39 W	1598.39
0.00						
8700.00	88.720	270.000	7249.38	0.00 N	1608.39 W	1608.39
0.00						
8710.00	88.720	270.000	7249.61	0.00 N	1618.39 W	1618.39
0.00						
8720.00	88.720	270.000	7249.83	0.00 N	1628.39 W	1628.39
0.00						
8730.00	88.720	270.000	7250.05	0.00 N	1638.38 W	1638.38
0.00						
8740.00	88.720	270.000	7250.28	0.00 N	1648.38 W	1648.38

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0.00						
8750.00	88.720	270.000	7250.50	0.00 N	1658.38 W	1658.38
0.00						
8760.00	88.720	270.000	7250.72	0.00 N	1668.38 W	1668.38
0.00						
8770.00	88.720	270.000	7250.95	0.00 N	1678.37 W	1678.37
0.00						
8780.00	88.720	270.000	7251.17	0.00 N	1688.37 W	1688.37
0.00						
8790.00	88.720	270.000	7251.39	0.00 N	1698.37 W	1698.37
0.00						
8800.00	88.720	270.000	7251.62	0.00 N	1708.37 W	1708.37
0.00						
8810.00	88.720	270.000	7251.84	0.00 N	1718.36 W	1718.36
0.00						
8820.00	88.720	270.000	7252.06	0.00 N	1728.36 W	1728.36
0.00						
8830.00	88.720	270.000	7252.29	0.00 N	1738.36 W	1738.36
0.00						
8840.00	88.720	270.000	7252.51	0.00 N	1748.36 W	1748.36
0.00						
8850.00	88.720	270.000	7252.73	0.00 N	1758.35 W	1758.35
0.00						
8860.00	88.720	270.000	7252.96	0.00 N	1768.35 W	1768.35
0.00						
8870.00	88.720	270.000	7253.18	0.00 N	1778.35 W	1778.35
0.00						
8880.00	88.720	270.000	7253.40	0.00 N	1788.35 W	1788.35
0.00						
8890.00	88.720	270.000	7253.63	0.00 N	1798.34 W	1798.34
0.00						
8900.00	88.720	270.000	7253.85	0.00 N	1808.34 W	1808.34
0.00						
8910.00	88.720	270.000	7254.07	0.00 N	1818.34 W	1818.34
0.00						
8920.00	88.720	270.000	7254.30	0.00 N	1828.34 W	1828.34
0.00						
8930.00	88.720	270.000	7254.52	0.00 N	1838.33 W	1838.33
0.00						
8940.00	88.720	270.000	7254.74	0.00 N	1848.33 W	1848.33
0.00						
8950.00	88.720	270.000	7254.97	0.00 N	1858.33 W	1858.33
0.00						
8960.00	88.720	270.000	7255.19	0.00 N	1868.33 W	1868.33
0.00						
8970.00	88.720	270.000	7255.41	0.00 N	1878.32 W	1878.32
0.00						
8980.00	88.720	270.000	7255.64	0.00 N	1888.32 W	1888.32
0.00						
8990.00	88.720	270.000	7255.86	0.00 N	1898.32 W	1898.32
0.00						
9000.00	88.720	270.000	7256.08	0.00 N	1908.32 W	1908.32
0.00						
9010.00	88.720	270.000	7256.31	0.00 N	1918.31 W	1918.31
0.00						
9020.00	88.720	270.000	7256.53	0.00 N	1928.31 W	1928.31
0.00						
9030.00	88.720	270.000	7256.75	0.00 N	1938.31 W	1938.31
0.00						
9040.00	88.720	270.000	7256.98	0.00 N	1948.31 W	1948.31
0.00						
9050.00	88.720	270.000	7257.20	0.00 N	1958.30 W	1958.30
0.00						

			Nitro 11 Federal #2 Lateral Plan #1			
9060.00	88.720	270.000	7257.42	0.00 N	1968.30 W	1968.30
0.00						
9070.00	88.720	270.000	7257.65	0.00 N	1978.30 W	1978.30
0.00						
9080.00	88.720	270.000	7257.87	0.00 N	1988.30 W	1988.30
0.00						
9090.00	88.720	270.000	7258.09	0.00 N	1998.29 W	1998.29
0.00						
9100.00	88.720	270.000	7258.32	0.00 N	2008.29 W	2008.29
0.00						
9110.00	88.720	270.000	7258.54	0.00 N	2018.29 W	2018.29
0.00						
9120.00	88.720	270.000	7258.76	0.00 N	2028.29 W	2028.29
0.00						
9130.00	88.720	270.000	7258.99	0.00 N	2038.28 W	2038.28
0.00						
9140.00	88.720	270.000	7259.21	0.00 N	2048.28 W	2048.28
0.00						
9150.00	88.720	270.000	7259.43	0.00 N	2058.28 W	2058.28
0.00						
9160.00	88.720	270.000	7259.66	0.00 N	2068.28 W	2068.28
0.00						
9170.00	88.720	270.000	7259.88	0.00 N	2078.27 W	2078.27
0.00						
9180.00	88.720	270.000	7260.11	0.00 N	2088.27 W	2088.27
0.00						
9190.00	88.720	270.000	7260.33	0.00 N	2098.27 W	2098.27
0.00						
9200.00	88.720	270.000	7260.55	0.00 N	2108.27 W	2108.27
0.00						
9210.00	88.720	270.000	7260.78	0.00 N	2118.26 W	2118.26
0.00						
9220.00	88.720	270.000	7261.00	0.00 N	2128.26 W	2128.26
0.00						
9230.00	88.720	270.000	7261.22	0.00 N	2138.26 W	2138.26
0.00						
9240.00	88.720	270.000	7261.45	0.00 N	2148.26 W	2148.26
0.00						
9250.00	88.720	270.000	7261.67	0.00 N	2158.25 W	2158.25
0.00						
9260.00	88.720	270.000	7261.89	0.00 N	2168.25 W	2168.25
0.00						
9270.00	88.720	270.000	7262.12	0.00 N	2178.25 W	2178.25
0.00						
9280.00	88.720	270.000	7262.34	0.00 N	2188.25 W	2188.25
0.00						
9290.00	88.720	270.000	7262.56	0.00 N	2198.24 W	2198.24
0.00						
9300.00	88.720	270.000	7262.79	0.00 N	2208.24 W	2208.24
0.00						
9310.00	88.720	270.000	7263.01	0.00 N	2218.24 W	2218.24
0.00						
9320.00	88.720	270.000	7263.23	0.00 N	2228.24 W	2228.24
0.00						
9330.00	88.720	270.000	7263.46	0.00 N	2238.23 W	2238.23
0.00						
9340.00	88.720	270.000	7263.68	0.00 N	2248.23 W	2248.23
0.00						
9350.00	88.720	270.000	7263.90	0.00 N	2258.23 W	2258.23
0.00						
9360.00	88.720	270.000	7264.13	0.00 N	2268.23 W	2268.23
0.00						
9370.00	88.720	270.000	7264.35	0.00 N	2278.22 W	2278.22

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0.00						
9380.00	88.720	270.000	7264.57	0.00 N	2288.22 W	2288.22
0.00						
9390.00	88.720	270.000	7264.80	0.00 N	2298.22 W	2298.22
0.00						
9400.00	88.720	270.000	7265.02	0.00 N	2308.22 W	2308.22
0.00						
9410.00	88.720	270.000	7265.24	0.00 N	2318.21 W	2318.21
0.00						
9420.00	88.720	270.000	7265.47	0.00 N	2328.21 W	2328.21
0.00						
9430.00	88.720	270.000	7265.69	0.00 N	2338.21 W	2338.21
0.00						
9440.00	88.720	270.000	7265.91	0.00 N	2348.21 W	2348.21
0.00						
9450.00	88.720	270.000	7266.14	0.00 N	2358.20 W	2358.20
0.00						
9460.00	88.720	270.000	7266.36	0.00 N	2368.20 W	2368.20
0.00						
9470.00	88.720	270.000	7266.58	0.00 N	2378.20 W	2378.20
0.00						
9480.00	88.720	270.000	7266.81	0.00 N	2388.20 W	2388.20
0.00						
9490.00	88.720	270.000	7267.03	0.00 N	2398.19 W	2398.19
0.00						
9500.00	88.720	270.000	7267.25	0.00 N	2408.19 W	2408.19
0.00						
9510.00	88.720	270.000	7267.48	0.00 N	2418.19 W	2418.19
0.00						
9520.00	88.720	270.000	7267.70	0.00 N	2428.19 W	2428.19
0.00						
9530.00	88.720	270.000	7267.92	0.00 N	2438.18 W	2438.18
0.00						
9540.00	88.720	270.000	7268.15	0.00 N	2448.18 W	2448.18
0.00						
9550.00	88.720	270.000	7268.37	0.00 N	2458.18 W	2458.18
0.00						
9560.00	88.720	270.000	7268.59	0.00 N	2468.18 W	2468.18
0.00						
9570.00	88.720	270.000	7268.82	0.00 N	2478.17 W	2478.17
0.00						
9580.00	88.720	270.000	7269.04	0.00 N	2488.17 W	2488.17
0.00						
9590.00	88.720	270.000	7269.26	0.00 N	2498.17 W	2498.17
0.00						
9600.00	88.720	270.000	7269.49	0.00 N	2508.17 W	2508.17
0.00						
9610.00	88.720	270.000	7269.71	0.00 N	2518.16 W	2518.16
0.00						
9620.00	88.720	270.000	7269.93	0.00 N	2528.16 W	2528.16
0.00						
9630.00	88.720	270.000	7270.16	0.00 N	2538.16 W	2538.16
0.00						
9640.00	88.720	270.000	7270.38	0.00 N	2548.16 W	2548.16
0.00						
9650.00	88.720	270.000	7270.60	0.00 N	2558.15 W	2558.15
0.00						
9660.00	88.720	270.000	7270.83	0.00 N	2568.15 W	2568.15
0.00						
9670.00	88.720	270.000	7271.05	0.00 N	2578.15 W	2578.15
0.00						
9680.00	88.720	270.000	7271.27	0.00 N	2588.15 W	2588.15
0.00						

			Nitro 11 Federal #2 Lateral Plan #1			
9690.00	88.720	270.000	7271.50	0.00 N	2598.14 W	2598.14
0.00						
9700.00	88.720	270.000	7271.72	0.00 N	2608.14 W	2608.14
0.00						
9710.00	88.720	270.000	7271.94	0.00 N	2618.14 W	2618.14
0.00						
9720.00	88.720	270.000	7272.17	0.00 N	2628.14 W	2628.14
0.00						
9730.00	88.720	270.000	7272.39	0.00 N	2638.13 W	2638.13
0.00						
9740.00	88.720	270.000	7272.61	0.00 N	2648.13 W	2648.13
0.00						
9750.00	88.720	270.000	7272.84	0.00 N	2658.13 W	2658.13
0.00						
9760.00	88.720	270.000	7273.06	0.00 N	2668.13 W	2668.13
0.00						
9770.00	88.720	270.000	7273.28	0.00 N	2678.12 W	2678.12
0.00						
9780.00	88.720	270.000	7273.51	0.00 N	2688.12 W	2688.12
0.00						
9790.00	88.720	270.000	7273.73	0.00 N	2698.12 W	2698.12
0.00						
9800.00	88.720	270.000	7273.95	0.00 N	2708.12 W	2708.12
0.00						
9810.00	88.720	270.000	7274.18	0.00 N	2718.11 W	2718.11
0.00						
9820.00	88.720	270.000	7274.40	0.00 N	2728.11 W	2728.11
0.00						
9830.00	88.720	270.000	7274.63	0.00 N	2738.11 W	2738.11
0.00						
9840.00	88.720	270.000	7274.85	0.00 N	2748.11 W	2748.11
0.00						
9850.00	88.720	270.000	7275.07	0.00 N	2758.10 W	2758.10
0.00						
9860.00	88.720	270.000	7275.30	0.00 N	2768.10 W	2768.10
0.00						
9870.00	88.720	270.000	7275.52	0.00 N	2778.10 W	2778.10
0.00						
9880.00	88.720	270.000	7275.74	0.00 N	2788.10 W	2788.10
0.00						
9890.00	88.720	270.000	7275.97	0.00 N	2798.09 W	2798.09
0.00						
9900.00	88.720	270.000	7276.19	0.00 N	2808.09 W	2808.09
0.00						
9910.00	88.720	270.000	7276.41	0.00 N	2818.09 W	2818.09
0.00						
9920.00	88.720	270.000	7276.64	0.00 N	2828.09 W	2828.09
0.00						
9930.00	88.720	270.000	7276.86	0.00 N	2838.08 W	2838.08
0.00						
9940.00	88.720	270.000	7277.08	0.00 N	2848.08 W	2848.08
0.00						
9950.00	88.720	270.000	7277.31	0.00 N	2858.08 W	2858.08
0.00						
9960.00	88.720	270.000	7277.53	0.00 N	2868.08 W	2868.08
0.00						
9970.00	88.720	270.000	7277.75	0.00 N	2878.07 W	2878.07
0.00						
9980.00	88.720	270.000	7277.98	0.00 N	2888.07 W	2888.07
0.00						
9990.00	88.720	270.000	7278.20	0.00 N	2898.07 W	2898.07
0.00						
10000.00	88.720	270.000	7278.42	0.00 N	2908.07 W	2908.07

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0.00						
10010.00	88.720	270.000	7278.65	0.00 N	2918.06 W	2918.06
0.00						
10020.00	88.720	270.000	7278.87	0.00 N	2928.06 W	2928.06
0.00						
10030.00	88.720	270.000	7279.09	0.00 N	2938.06 W	2938.06
0.00						
10040.00	88.720	270.000	7279.32	0.00 N	2948.06 W	2948.06
0.00						
10050.00	88.720	270.000	7279.54	0.00 N	2958.05 W	2958.05
0.00						
10060.00	88.720	270.000	7279.76	0.00 N	2968.05 W	2968.05
0.00						
10070.00	88.720	270.000	7279.99	0.00 N	2978.05 W	2978.05
0.00						
10080.00	88.720	270.000	7280.21	0.00 N	2988.05 W	2988.05
0.00						
10090.00	88.720	270.000	7280.43	0.00 N	2998.04 W	2998.04
0.00						
10100.00	88.720	270.000	7280.66	0.00 N	3008.04 W	3008.04
0.00						
10110.00	88.720	270.000	7280.88	0.00 N	3018.04 W	3018.04
0.00						
10120.00	88.720	270.000	7281.10	0.00 N	3028.04 W	3028.04
0.00						
10130.00	88.720	270.000	7281.33	0.00 N	3038.03 W	3038.03
0.00						
10140.00	88.720	270.000	7281.55	0.00 N	3048.03 W	3048.03
0.00						
10150.00	88.720	270.000	7281.77	0.00 N	3058.03 W	3058.03
0.00						
10160.00	88.720	270.000	7282.00	0.00 N	3068.03 W	3068.03
0.00						
10170.00	88.720	270.000	7282.22	0.00 N	3078.02 W	3078.02
0.00						
10180.00	88.720	270.000	7282.44	0.00 N	3088.02 W	3088.02
0.00						
10190.00	88.720	270.000	7282.67	0.00 N	3098.02 W	3098.02
0.00						
10200.00	88.720	270.000	7282.89	0.00 N	3108.02 W	3108.02
0.00						
10210.00	88.720	270.000	7283.11	0.00 N	3118.01 W	3118.01
0.00						
10220.00	88.720	270.000	7283.34	0.00 N	3128.01 W	3128.01
0.00						
10230.00	88.720	270.000	7283.56	0.00 N	3138.01 W	3138.01
0.00						
10240.00	88.720	270.000	7283.78	0.00 N	3148.01 W	3148.01
0.00						
10250.00	88.720	270.000	7284.01	0.00 N	3158.00 W	3158.00
0.00						
10260.00	88.720	270.000	7284.23	0.00 N	3168.00 W	3168.00
0.00						
10270.00	88.720	270.000	7284.45	0.00 N	3178.00 W	3178.00
0.00						
10280.00	88.720	270.000	7284.68	0.00 N	3188.00 W	3188.00
0.00						
10290.00	88.720	270.000	7284.90	0.00 N	3197.99 W	3197.99
0.00						
10300.00	88.720	270.000	7285.12	0.00 N	3207.99 W	3207.99
0.00						
10310.00	88.720	270.000	7285.35	0.00 N	3217.99 W	3217.99
0.00						

			Nitro 11 Federal #2	Lateral Plan #1		
10320.00	88.720	270.000	7285.57	0.00 N	3227.99 W	3227.99
0.00						
10330.00	88.720	270.000	7285.79	0.00 N	3237.98 W	3237.98
0.00						
10340.00	88.720	270.000	7286.02	0.00 N	3247.98 W	3247.98
0.00						
10350.00	88.720	270.000	7286.24	0.00 N	3257.98 W	3257.98
0.00						
10360.00	88.720	270.000	7286.46	0.00 N	3267.98 W	3267.98
0.00						
10370.00	88.720	270.000	7286.69	0.00 N	3277.97 W	3277.97
0.00						
10380.00	88.720	270.000	7286.91	0.00 N	3287.97 W	3287.97
0.00						
10390.00	88.720	270.000	7287.13	0.00 N	3297.97 W	3297.97
0.00						
10400.00	88.720	270.000	7287.36	0.00 N	3307.97 W	3307.97
0.00						
10410.00	88.720	270.000	7287.58	0.00 N	3317.96 W	3317.96
0.00						
10420.00	88.720	270.000	7287.80	0.00 N	3327.96 W	3327.96
0.00						
10430.00	88.720	270.000	7288.03	0.00 N	3337.96 W	3337.96
0.00						
10440.00	88.720	270.000	7288.25	0.00 N	3347.96 W	3347.96
0.00						
10450.00	88.720	270.000	7288.47	0.00 N	3357.95 W	3357.95
0.00						
10460.00	88.720	270.000	7288.70	0.00 N	3367.95 W	3367.95
0.00						
10470.00	88.720	270.000	7288.92	0.00 N	3377.95 W	3377.95
0.00						
10480.00	88.720	270.000	7289.14	0.00 N	3387.95 W	3387.95
0.00						
10490.00	88.720	270.000	7289.37	0.00 N	3397.94 W	3397.94
0.00						
10500.00	88.720	270.000	7289.59	0.00 N	3407.94 W	3407.94
0.00						
10510.00	88.720	270.000	7289.82	0.00 N	3417.94 W	3417.94
0.00						
10520.00	88.720	270.000	7290.04	0.00 N	3427.94 W	3427.94
0.00						
10530.00	88.720	270.000	7290.26	0.00 N	3437.93 W	3437.93
0.00						
10540.00	88.720	270.000	7290.49	0.00 N	3447.93 W	3447.93
0.00						
10550.00	88.720	270.000	7290.71	0.00 N	3457.93 W	3457.93
0.00						
10560.00	88.720	270.000	7290.93	0.00 N	3467.93 W	3467.93
0.00						
10570.00	88.720	270.000	7291.16	0.00 N	3477.92 W	3477.92
0.00						
10580.00	88.720	270.000	7291.38	0.00 N	3487.92 W	3487.92
0.00						
10590.00	88.720	270.000	7291.60	0.00 N	3497.92 W	3497.92
0.00						
10600.00	88.720	270.000	7291.83	0.00 N	3507.92 W	3507.92
0.00						
10610.00	88.720	270.000	7292.05	0.00 N	3517.91 W	3517.91
0.00						
10620.00	88.720	270.000	7292.27	0.00 N	3527.91 W	3527.91
0.00						
10630.00	88.720	270.000	7292.50	0.00 N	3537.91 W	3537.91

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0.00						
10640.00	88.720	270.000	7292.72	0.00 N	3547.91 W	3547.91
0.00						
10650.00	88.720	270.000	7292.94	0.00 N	3557.90 W	3557.90
0.00						
10660.00	88.720	270.000	7293.17	0.00 N	3567.90 W	3567.90
0.00						
10670.00	88.720	270.000	7293.39	0.00 N	3577.90 W	3577.90
0.00						
10680.00	88.720	270.000	7293.61	0.00 N	3587.90 W	3587.90
0.00						
10690.00	88.720	270.000	7293.84	0.00 N	3597.89 W	3597.89
0.00						
10700.00	88.720	270.000	7294.06	0.00 N	3607.89 W	3607.89
0.00						
10710.00	88.720	270.000	7294.28	0.00 N	3617.89 W	3617.89
0.00						
10720.00	88.720	270.000	7294.51	0.00 N	3627.89 W	3627.89
0.00						
10730.00	88.720	270.000	7294.73	0.00 N	3637.88 W	3637.88
0.00						
10740.00	88.720	270.000	7294.95	0.00 N	3647.88 W	3647.88
0.00						
10750.00	88.720	270.000	7295.18	0.00 N	3657.88 W	3657.88
0.00						
10760.00	88.720	270.000	7295.40	0.00 N	3667.88 W	3667.88
0.00						
10770.00	88.720	270.000	7295.62	0.00 N	3677.87 W	3677.87
0.00						
10780.00	88.720	270.000	7295.85	0.00 N	3687.87 W	3687.87
0.00						
10790.00	88.720	270.000	7296.07	0.00 N	3697.87 W	3697.87
0.00						
10800.00	88.720	270.000	7296.29	0.00 N	3707.87 W	3707.87
0.00						
10810.00	88.720	270.000	7296.52	0.00 N	3717.86 W	3717.86
0.00						
10820.00	88.720	270.000	7296.74	0.00 N	3727.86 W	3727.86
0.00						
10830.00	88.720	270.000	7296.96	0.00 N	3737.86 W	3737.86
0.00						
10840.00	88.720	270.000	7297.19	0.00 N	3747.86 W	3747.86
0.00						
10850.00	88.720	270.000	7297.41	0.00 N	3757.85 W	3757.85
0.00						
10860.00	88.720	270.000	7297.63	0.00 N	3767.85 W	3767.85
0.00						
10870.00	88.720	270.000	7297.86	0.00 N	3777.85 W	3777.85
0.00						
10880.00	88.720	270.000	7298.08	0.00 N	3787.85 W	3787.85
0.00						
10890.00	88.720	270.000	7298.30	0.00 N	3797.84 W	3797.84
0.00						
10900.00	88.720	270.000	7298.53	0.00 N	3807.84 W	3807.84
0.00						
10910.00	88.720	270.000	7298.75	0.00 N	3817.84 W	3817.84
0.00						
10920.00	88.720	270.000	7298.97	0.00 N	3827.84 W	3827.84
0.00						
10930.00	88.720	270.000	7299.20	0.00 N	3837.83 W	3837.83
0.00						
10940.00	88.720	270.000	7299.42	0.00 N	3847.83 W	3847.83
0.00						

			Nitro 11 Federal #2 Lateral Plan #1			
10950.00	88.720	270.000	7299.64	0.00 N	3857.83 W	3857.83
0.00						
10960.00	88.720	270.000	7299.87	0.00 N	3867.83 W	3867.83
0.00						
10970.00	88.720	270.000	7300.09	0.00 N	3877.82 W	3877.82
0.00						
10980.00	88.720	270.000	7300.31	0.00 N	3887.82 W	3887.82
0.00						
10990.00	88.720	270.000	7300.54	0.00 N	3897.82 W	3897.82
0.00						
11000.00	88.720	270.000	7300.76	0.00 N	3907.82 W	3907.82
0.00						
11010.00	88.720	270.000	7300.98	0.00 N	3917.81 W	3917.81
0.00						
11020.00	88.720	270.000	7301.21	0.00 N	3927.81 W	3927.81
0.00						
11030.00	88.720	270.000	7301.43	0.00 N	3937.81 W	3937.81
0.00						
11040.00	88.720	270.000	7301.65	0.00 N	3947.81 W	3947.81
0.00						
11050.00	88.720	270.000	7301.88	0.00 N	3957.80 W	3957.80
0.00						
11060.00	88.720	270.000	7302.10	0.00 N	3967.80 W	3967.80
0.00						
11070.00	88.720	270.000	7302.32	0.00 N	3977.80 W	3977.80
0.00						
11080.00	88.720	270.000	7302.55	0.00 N	3987.80 W	3987.80
0.00						
11090.00	88.720	270.000	7302.77	0.00 N	3997.79 W	3997.79
0.00						
11100.00	88.720	270.000	7302.99	0.00 N	4007.79 W	4007.79
0.00						
11110.00	88.720	270.000	7303.22	0.00 N	4017.79 W	4017.79
0.00						
11120.00	88.720	270.000	7303.44	0.00 N	4027.79 W	4027.79
0.00						
11130.00	88.720	270.000	7303.66	0.00 N	4037.78 W	4037.78
0.00						
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0.00						
11150.00	88.720	270.000	7304.11	0.00 N	4057.78 W	4057.78
0.00						
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0.00						
11170.00	88.720	270.000	7304.56	0.00 N	4077.77 W	4077.77
0.00						
11180.00	88.720	270.000	7304.78	0.00 N	4087.77 W	4087.77
0.00						
11190.00	88.720	270.000	7305.01	0.00 N	4097.77 W	4097.77
0.00						
11200.00	88.720	270.000	7305.23	0.00 N	4107.77 W	4107.77
0.00						
11210.00	88.720	270.000	7305.45	0.00 N	4117.76 W	4117.76
0.00						
11220.00	88.720	270.000	7305.68	0.00 N	4127.76 W	4127.76
0.00						
11230.00	88.720	270.000	7305.90	0.00 N	4137.76 W	4137.76
0.00						
11240.00	88.720	270.000	7306.12	0.00 N	4147.76 W	4147.76
0.00						
11250.00	88.720	270.000	7306.35	0.00 N	4157.75 W	4157.75
0.00						
11260.00	88.720	270.000	7306.57	0.00 N	4167.75 W	4167.75

Nitro 11 Federal #2 Lateral Plan #1

0.00						
11270.00	88.720	270.000	7306.79	0.00 N	4177.75 W	4177.75
0.00						
11280.00	88.720	270.000	7307.02	0.00 N	4187.75 W	4187.75
0.00						
11290.00	88.720	270.000	7307.24	0.00 N	4197.74 W	4197.74
0.00						
11300.00	88.720	270.000	7307.46	0.00 N	4207.74 W	4207.74
0.00						
11310.00	88.720	270.000	7307.69	0.00 N	4217.74 W	4217.74
0.00						
11320.00	88.720	270.000	7307.91	0.00 N	4227.74 W	4227.74
0.00						
11330.00	88.720	270.000	7308.13	0.00 N	4237.73 W	4237.73
0.00						
11340.00	88.720	270.000	7308.36	0.00 N	4247.73 W	4247.73
0.00						
11350.00	88.720	270.000	7308.58	0.00 N	4257.73 W	4257.73
0.00						
11360.00	88.720	270.000	7308.80	0.00 N	4267.73 W	4267.73
0.00						
11370.00	88.720	270.000	7309.03	0.00 N	4277.72 W	4277.72
0.00						
11380.00	88.720	270.000	7309.25	0.00 N	4287.72 W	4287.72
0.00						
11390.00	88.720	270.000	7309.47	0.00 N	4297.72 W	4297.72
0.00						
11400.00	88.720	270.000	7309.70	0.00 N	4307.72 W	4307.72
0.00						
11401.57	88.720	270.000	7309.73	0.00 N	4309.29 W	4309.29
0.00						

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Site and calculated along an Azimuth of 270.000° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.
Central meridian is -104.333°.
Grid Convergence at Surface is 0.160°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 11401.57ft., the Bottom Hole Displacement is 4309.29ft., in the Direction of 270.000° (Grid).

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Cimarex Energy Co. of Colorado
LEASE NO.:	NM-0556811
WELL NAME & NO.:	2H-Nitro 11 Federal
SURFACE HOLE FOOTAGE:	375' FNL & 660' FEL
BOTTOM HOLE FOOTAGE:	375' FNL & 330' FWL
LOCATION:	Section 11, T. 16 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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☐ **Special Requirements**
- ☒ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
- ☐ **Reserve Pit Closure/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

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. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 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 stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 70' X 15' on the North side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 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. 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 thirty (30) 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.

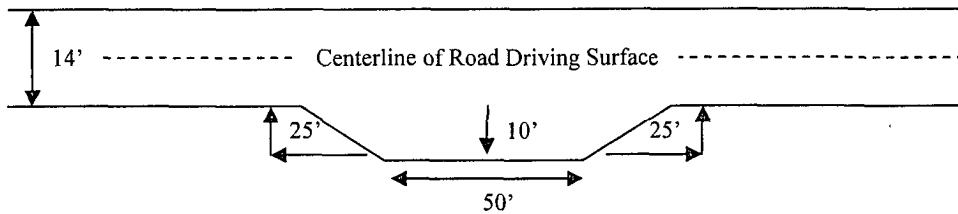
Ditching

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 be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

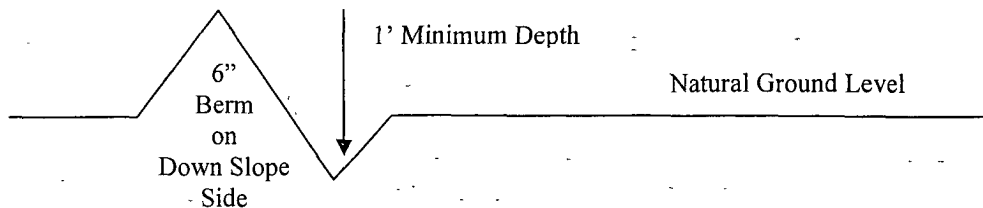


Drainage

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:

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

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road 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 cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

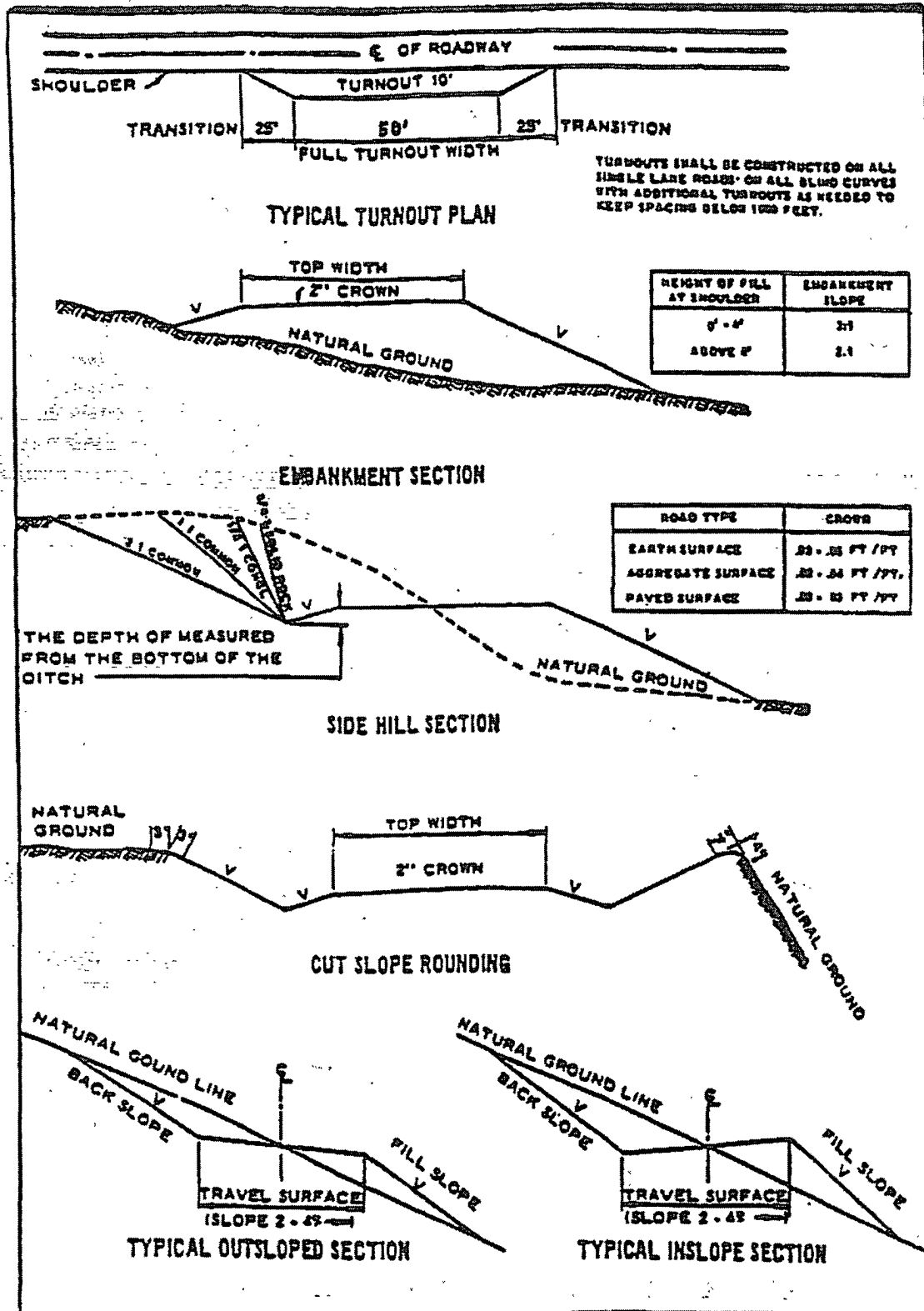
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



VI. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Chaves and Roosevelt Counties, T16S Eddy County**

Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
(575) 627-0205 and (575) 361-2822.

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a possible hazard. If Hydrogen Sulfide is encountered, please report measured amounts 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.
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 are located, this does not include the dog house or stairway area.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work.

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

Possible lost circulation in the Grayburg and San Andres formations.
Possible water flows in the Salado and Artesia Groups.

1. The 13-3/8 inch surface casing shall be set **at approximately 340 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time 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. (This is to include the lead cement).
 - c. **Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.**
 - d. 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.
 - e. 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 is:
 - ☒ Cement to surface. If cement does not circulate see B.1.a-e above.
 - a. **Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.**

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - ☒ Cement should tie-back at least 200 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. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. 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.
 - d. 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.
 - e. A variance to test only the surface casing to the reduced pressure of 1000 psi with the rig pumps is approved. **The BOP will be tested to 5000 psi by an independent service company.**

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VII. 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.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

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, Munsell Soil Color Chart # 5Y 4/2

VIII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting 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.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions 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 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.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

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:

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

*Pounds of pure live seed:

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

(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.