Form 3160-3 (April 2004)

UNITED STATES **OPP**DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

TOPE SON TOPE

FORM APPROVED OMB NO 1004-0137 Expires March 31, 2007

	APPLICATION FOR PE	RMIT TO DRILL O	R REENTER	PER 12 CA	5	Lease Serial No NMNM14758	
1a Type of Work	X DRILL	REENTER	1	IOBBSO(6	If Indian, Allotee	or Tribe Name
lb Type of Well	X Oil Well Gas Wel	Other	Single Zone	Multiple Zon	ie 7	Unit or CA Agree	ment Name and No
 Name of Operator Nearburg Produ 	ucing Company	6742)			8	Lease Name and \	/ Y ZY)
3a Address	ic mg company		3b Phone N	Vo (include area co	de) 9	Huber 3 Fed	eral #3H
3300 N A St.,	Bldg 2, Ste 120 Report location clearly and in ac	and area with any State	43	2/686-8235		30-01	6-38163
	•	•	equirements).		10	Field and Pool, or Cemetary; Yo	
330	FNL and 660 FEL, Sec	3-203-255			11	Sec, T, R, M, o	or Blk and Survey or Are
At proposed prod z	one 330 FSL and	1 660 FEL, Sec 3	-20S-25E			3-20S-25E	
14 Distance in miles an	d direction from nearest town or					County or Parish	13 State
		s SW of Lakewood				ldy	NM
15 Distance from prop location to nearest property or lease li	ne, ft 330	ı	16 No of Acres	in lease 42.36	17 Spacii	ng Unit dedicated t 160.54	
(Also to nearest dr	· · · · · · · · · · · · · · · · · · ·		*		ļ		
18 Distance from prop to nearest well, dril			19 Proposed De	pth	20 BLM	/BIA Bond No or	ı file
applied for, on this	· .		6980' MD	30 2650D		NMB00	0153
21 Elevations (Show w	hether DF, KDB, RT, GL, etc		22 Approximate	date work will sta	rt*	23 Estimated du	ration
3490				7/20/10		2	0 days
		24	Attachments				
The following, complet	ed in accordance with the require	ments of Onshore Oil an	d Gas Order No	1, shall be attached	to this for	rm	
2 A Drilling Plan3 A Surface Use Plan	by a registered surveyor n (if the location is on National F d with the appropriate Forest Ser		5 Opera 6 Such o	0 above) tor certification		·	sting bond on file (see
25 Sagnuature	\wedge	Nai	me (Printed/Type	ed)		Date	
Xlarak	(Jon dan	Sa	rah Jordan			16	17:10
Title		· · · · · · · · · · · · · · · · · · ·	······				
Production A	Analyst						
Approved by (Signautro	e) Dan Will	Nar	ne (<i>Printed/Type</i>	ed)		Date	9/2/10
Title	TW-FIELD MANAGE	R Off	ice	CARLSBAD	FIELD O	FFICE	
	oes not warrant or certify that the	ne applicant holds legal of	or equitable title	to those rights in t	the subject	lease which would	d entitle the applicant to
conduct operations ther Conditions of approval,				APPR(OVAL I	OR TWO	/EARS
Title 18 U S C Section States any false, fictition	1001 and Title 43 U S C Sections or fraudulent statements or rep	n 1212, make it a crime foresentations as to any ma	or any person kn atter within its ju	owlingly and willfurisdiction	lly to make	to any departmen	t or agency of the United

*(Instructions on page 2)

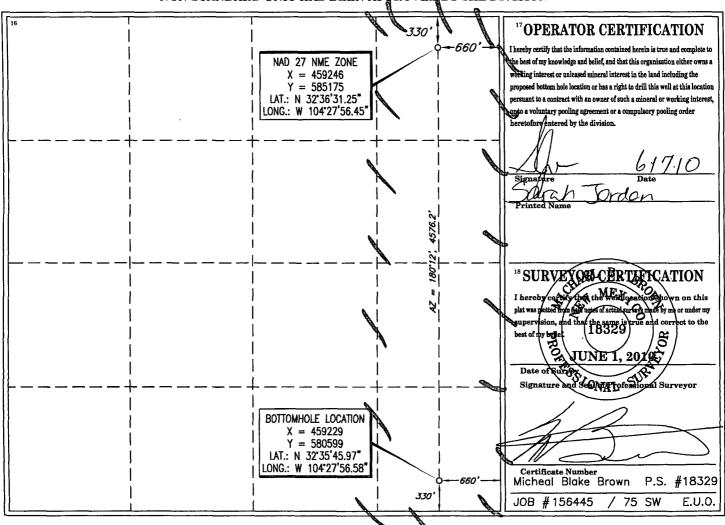
Roswell Controlled Water Basin

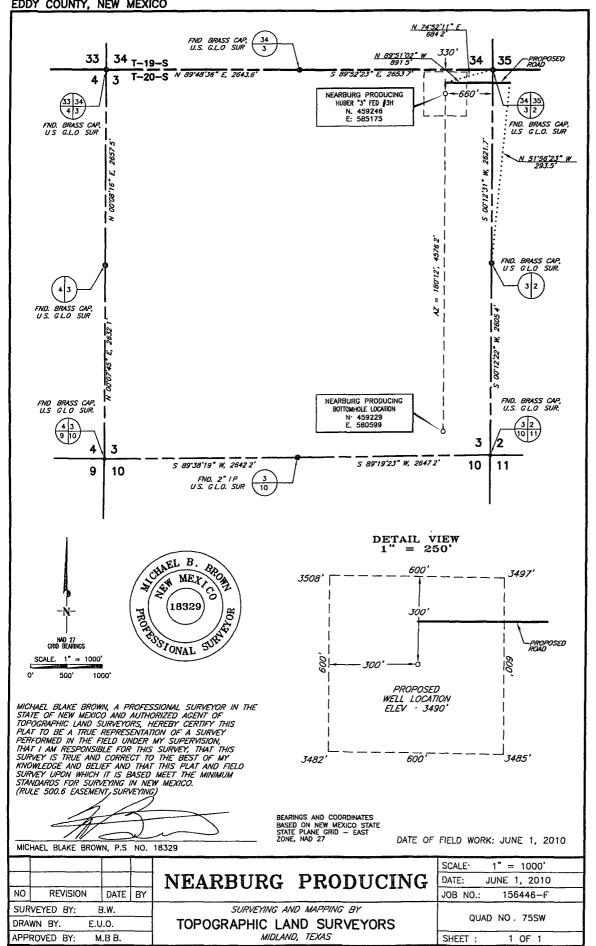
KZ 09/13/10

Approval Subject to General Requirements & Special Stipulations Attached

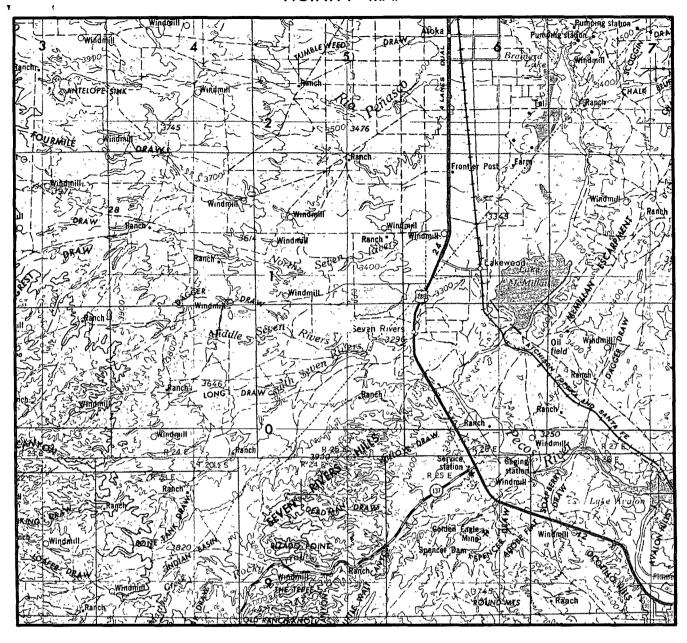
SEE ATTACHED FOR CONDITIONS OF APPROVAL

DISTRICT II 1625 N. Frence DISTRICT III 1301 W. Grand DISTRICT III 1000 Rio Braz	d Avenue _ zos Rd., A	, Artesia, NM	Energy, Mines	rals, and I CONSER 1220 Sout	of New Mexic Natural Reso VATION D th St. Francis New Mexico	urces Departr NVISION s Dr.	nent	Revised Octobe propriate Distr State Lease Fee Lease	ict Office - 4 copies - 3 copies
		Santa Fe, NM	87505				;	AMENDED	REPORT
		WEI	LL LOCATIO	N AND	ACREAGE	DEDICATION	ON PLAT		•
30-6	API Number		² Pool Code	<	Cer		I Name		
Property	96			HUBE]	perty Name R "3" FED		 	6 Well Nun	
70GRID 0/574	_		Ŋ	•	erator Name G PRODUCI	NG		⁹ Elevati 349 0	
				Surfac	e Location				
UL or lot no.	Section 3	Township 20 SOUTH	Range 25 EAST, N.M.1	Lot Idn		North/South line NORTH	Feet from the 860'	East/West line	County EDDY
			Bottom Hole	Location	If Different l	From Surface			
UL or lot no.	Section 3	Township 20 SOUTH	Range 25 EAST, N.M.1	P.M.	Feet from the 330'	North/South line	Feet from the 660'	East/West line EAST	County EDDY
Dedicated Act	res 13 Jo	oint or Infill	14 Consolidation Code	o la Orden	No.				
NO ALLOWAI	BLE WE		GNED TO THIS (-STANDARD UN					CONSOLIDAT	ED OR A





VICINITY MAP



SECTION	3	TWP.	20-S	R	GE	25-E	
SURVEY	NEW	MEXICO	PRINCIPAL	MER	IDIAN		
COUNTY		EDDY	S	TATE _	NM		
DESCRIPTION .		3.	30' FNL &	660'	FEL		

OPERATOR NEARBURG PRODUCING
LEASE HUBER 3 FED #3H
DISTANCE & DIRECTION FROM JCT. OF HWY. 285 & CO.
RD. 23, GO WEST 3.0 MILES ON CO. RD. 23, THENCE
SOUTH 1.0 MILES ON LEASE ROAD TO A POINT ±1000'
EAST OF THE LOCATION.

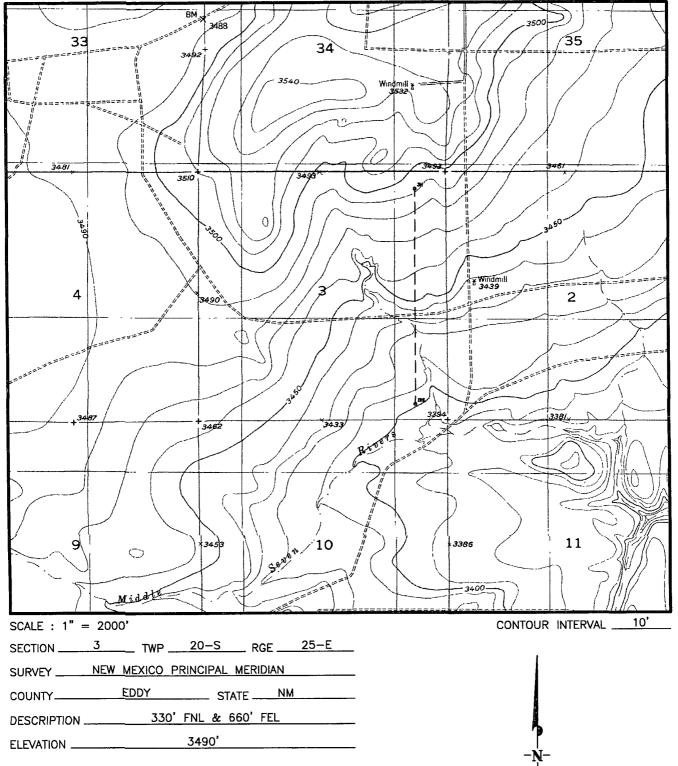


Topographic Land Surveyors

Surveying & Mapping for the Oil & Gas Industry

2903 N. BIG SPRING MIDLAND, TX. 79705 (800) 767-1653

LOCATION & ELEVATION VERIFICATION MAP



OPERATOR NEARBURG PRODUCING CO. LEASE _____ HUBER 3 FED #3H U.S.G.S. TOPOGRAPHIC MAP

SEVEN RIVERS, NEW MEXICO SCALED LAT. LAT.: N 32'36'31.25" LONG. LONG.: W 104'27'56.45"



TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

2903 N. BIG SPRING MIDLAND, TX. 79705 (800) 767-1653

ATTACHMENT TO FORM 3160-3 HUBER 3 FEDERAL #3H 330 FNL AND 660 FEL, SEC 3, 20S, 25E EDDY COUNTY, NEW MEXICO

DRILLING PROGRAM

1. GEOLOGIC NAME OF SURFACE FORMATION

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Glorietta 2450 Yeso 2550

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, OR GAS

San Adres 825 Veso 2550 Oi

Surface Fresh Water will be pretected by Arthing 8 7/8" cag @ 825'. come to surf.
4. CASING AND CEMENTING PROGRAM All new cay - per operator RGH 6-29-10

Casing Size	From To	Weight	Grade	<u>Joint</u>	Collapse	<u>Burst</u>	Tension
8-5/8"	0' - 825'	24#	J55	STC	1.125	1.125	1.6
5-1/2"	0' - 7.000 ' 0' - 7.000 '	17#	J55	LTC	1.125	1.125	1.6

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

We plan to drill a 12-1/4" hole to equal 800°. 8-5/8" casing will be cemented with 350 sxs Class "C" wt 14.8 yield 1.34 or volume necessary to bring cement back to surface.

7-7/8" hole will be drilled to \$\mathcal{L}000\$' and 5-1/2" production casing will be cemented with Stage 1: approximately 450 sxs of Acid Soluble Class "C" light wt 12.7 yield 1.91. Tail 100 sxs class c wt 14.8 yeild 1.34 DV @ 2000 TOC 200' above 8-5/8 csg shoe.

Open hole packers will be Simface per aperation RGH 6-29-10 installed below DV tool.

Set isolation ptr e 2450' Top of Glorietta with a port collar curt tool e 2,000' curt to surface. Por Butch Willis 41/10 CRN

HUBER 3 FEDERAL #3

Page 2

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Nipple up on 8-5/8 with 2M system and test to 2000 with independent tester

BOP will be operationally checked each 24 hr period. BOP will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and a 3" choke line will be included in the drilling spool located below the BOP. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 2000 psi WP rating.

6. TYPES AND CHARACTERTICS OF THE PROPOSED MUD SYSTEM

<u>Depth</u>	<u>Type System</u>	<u>Mud Wt</u>	$\underline{\text{Visc}}$	<u>Waterloss</u>
0 – 825	Fresh Water	8.4	29	N.C.
825 - 7000 6980	Cut Brine	8.9	29	N.C.

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. AUXILLARY WELL CONTROL AND MONITORING EQUIPMENT

None required.

8. LOGGING, TESTING, AND CORING PROGRAM



DLL/CNL/LDT/CAL/GR logging is planned. Drill stem tests, cores and sidewall cores are possible.

9. <u>ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS</u>

None anticipated.

BHP expected to be 1,100 psi.

10. ANTICAPATED STARTING DATE:

Is planned that operations will commence on July 20, 2010 with drilling and completion operation lasting about 20 days.



Horizontal Proposal Package

Nearburg Producing

Huber "3" Fed, Well No. 3H

Eddy County, NM

Attn: Butch Willis

Quote No.: 061010099

June 14, 2010

Mike Jensen <u>mjensen@aimdir.com</u>
Jake Venable <u>venable@aimdir.com</u>
Thomas Rinald <u>trinald@aimdir.com</u>
Allison Reinert <u>areinert@aimdir.com</u>

500:N Water St. Suite 404 Corpus Christi, Texas 78471 Phone: 361-653-6500 Fax: 361-653-6599

Nearburg Producing Co.

Huber "3" Federal, Well No. 3H Eddy County, New Mexico Sec. 3-20S-25E Ouote No. 061010099



SITE DETAILS

Huber "3" Fed #3H

Site Centre Northing 585175 00 Easting 459246 00

Ground Level 0 00 Positional Uncertainty 0 00 Convergence -0 14

FIELD DETAILS

Eddy County, New Mexico

Geodetic System US State Plane Coordinate System 1983 Ellipsoid GRS 1980 Zone New Mexico, Eastern Zone Magnetic Model WMM_2010

System Datum Mean Sea Level Local North Grid North

G Λт

Azimuths to Grid North True North 0 14° Magnetic North 8 36°

> Magnetic Field Strength 48858nT Dip Angle 60 38° Date 06/10/2010 Model WMM 2010

ANNOTATIONS

TVD MD Annotation No 2077 00 2077 00 KOP, Build 10 00°/100' 2649 96 2976 99 Hold 90 00°, 180 21° Azımuth 6980 07 PBHL - Lateral

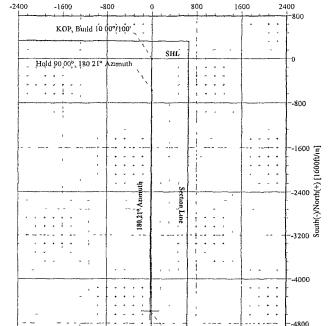
2650 00

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Lateral	2650 00	-4576 00	-17 00	580599 00	459229 00	32°35'45 000N	104°35'59 823W	Point

SECTION DETAILS

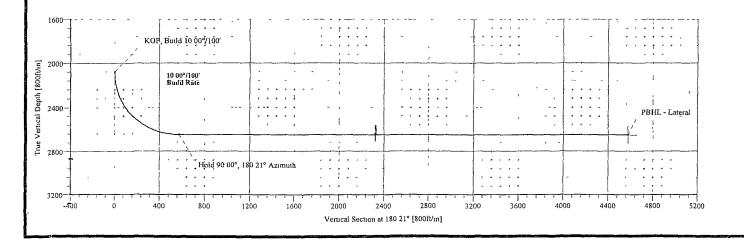
Sec	MD	Inc	Azı	TVD	→ N/-S	+E/-W	DLeg	1 Face	VSec	Target
	2077 00 2976 99		0 00	2077 00 2649 96	0 00 -572 95	0 00	0 00		0 00 572 95	
	6980 07			2650 00		-17 00				PBHL - Lateral



PBHL - Lateral

. . . 1 .

West(-)/East(+) [1600ft/in]



Drawn By ALR
Date Created 06/11/10
Date Revised 06/11/10
File Nearburg Producing- Huber 3 Fed #3H Lateral 1:0 gpf32

Planning Report - Geographic

Company: Nearburg Producing Company Field:

Huber "3" Fed #3H

Eddy County, New Mexico

Site: Well: #3H Wellpath: Lateral 1r0 Date: 06/11/2010

Vertical (TVD) Reference:

Section (VS) Reference:

Time: 10 11.56 Co-ordinate(NE) Reference: Well #3H, Grid North

SITE 0 0

Well (0 00N,0 00E,180 21Azı)

Page:

1

Lateral 1r0

Field:

Eddy County, New Mexico

Map System: US State Plane Coordinate System 1983

Geo Datum: GRS 1980 Sys Datum: Mean Sea Level Map Zone:

New Mexico, Eastern Zone

Coordinate System: Geomagnetic Model: Well Centre WMM_2010

Site:

Huber "3" Fed #3H

Site Position: From: Мар Position Uncertainty:

Ground Level:

Well Position:

Current Datum:

Northing: Easting:

585175 00 ft 459246 00 ft

Latitude: Longitude:

Slot Name:

30 282 N 59 758 W

North Reference: Grid Convergence:

Grid -0 14 deg

Well:

#3H

+E/-W

0 00 ft Northing: 585175 00 ft 0 00 ft Easting: 459246 00 ft

Height

Latitude: Longitude:

30 282 N 35 59 758 W

Surface

Position Uncertainty: Wellpath: Lateral 1r0 0 00 ft

0 00 ft

0 00 ft

Drilled From: 0 00 ft

Tie-on Depth: Above System Datum: Declination:

Mag Dip Angle

0 00 ft Mean Sea Level 8 21 deg 60 38 deg Direction

06/10/2010 Magnetic Data: 48858 nT Field Strength: Depth From (TVD) Vertical Section: ft

0 00

+N/-S+E/-W ft ft 0 00 0 00

deg 180 21

Plan: Lateral 1r0 Principal: Yes

Date Composed: Version: Tied-to:

06/11/2010

User Defined

Plan Section Information

	MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W	DLS deg/100f	Build t deg/100	Turn ft deg/100ft	TFO deg	Target
-	2077 00	0.00	0 00	2077 00	0 00	0 00	0.00	0 00	0 00	0 00	
	2976 99	90 00	180 21	2649 96	-572 95	-2 13	10 00	10 00	-19 98	180 21	
- 1	6980 07	90 00	180 21	2650 00	-4576 00	-17 00	0 00	0 00	0 00	0 00	PBHL - Lateral

Section 1: Start DLS 10 00 TFO 180 21

MD	Incl	Azim	TVD	+N/-S	+E/-W	VS.	DLS	Build	Turn	TFO	
ft	deg	deg	ft	ft	ft	ft	deg/1001	t deg/100f	t deg/100ft	deg	
2077 00	0.00	0 00	2077 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
2100 00	2 30	180 21	2099 99	-0 46	0 00	0 46	10 00	10.00	0 00	0 00	
2150 00	7 30	180 21	2149 80	-4 64	-0 02	4 64	10.00	10 00	0 00	0 00	
2200 00	12 30	180 21	2199 06	-13.15	-0 05	13.15	10 00	10 00	0 00	0 00	
2250 00	17 30	180 21	2247 38	-25 92	-0 10	25 92	10 00	10 00	0 00	0 00	
2300.00	22 30	180 21	2294.41	- 42 85	-0 16	42 85	10 00	10 00	0 00	0 00	
2350 00	27 30	180 21	2339 79	-63 82	-0 24	63 82	10 00	10 00	0 00	0 00	
2400 00	32 30	180 21	2383 16	-88 66	-0 33	88 66	10 00	10 00	0 00	0 00	
2450 00	37 30	180 21	2424 21	-117 18	-0 44	117 19	10 00	10.00	0 00	0 00	
2500 00	42 30	180 21	2462 61	-149 18	-0 55	149 18	10 00	10 00	0 00	0.00	
2550 00	47 30	180 21	2498 08	-184.40	-0 69	184 40	10 00	10 00	0 00	0 00	
2600 00	52 30	180 21	2530 34	-222 58	-0 83	222.58	10 00	10 00	0 00	0 00	
2650 00	57 30	180 21	2559 15	-263 42	-0 98	263 42	10 00	10 00	0 00	0 00	
2700 00	62 30	180 21	2584 29	-306 62	-1 14	306 62	10 00	10 00	0 00	0 00	
2750 00	67 30	180 21	2605 58	-351 85	-1 31	351 85	10 00	10 00	0 00	0 00	
2800 00	72 30	180 21	2622 83	-398 76	-1.48	398.76	10.00	10 00	0 00	0 00	
2850 00	77 30	180 21	2635 94	-446 99	-1 66	447 00	10 00	10 00	0 00	0 00	
2900.00	82.30	180 21	2644 79	- 496 19	-1 84	496 19	10 00	10 00	0 00	0 00	
2950 00	87 30	180 21	2649 32	-545 96	-2 03	545 97	10 00	10 00	0.00	0 00	
2976 99	90 00	180 21	2649 96	-572 95	-2 13	572 95	10 00	10 00	0 00	0 00	

Planning Report - Geographic

Company: Nearburg Producing Company Field: Eddy County, New Mexico Huber "3" Fed #3H

Date: 06/11/2010 Time: 10 11:56
Co-ordinate(NE) Reference: Well #3H, Grid North
Vertical-(TVD) Reference: SITE 0 0
Section (VS) Reference: Well (0 00N,0 00E,180 21Azi)
Lateral 1r0

Page:

2

Wellpath: Lateral 1r0 Section 2 · Start Hold

#3H

Site: Well:

MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	TFO
ft	deg	deg	ft	ft	ft	ft			t deg/100ft	deg
3000.00	90 00	180 21	2649,96	-595 95	-2 21	595 96	0 00	0 00	0 00	0 00
3100 00	90 00	180 21	2649 96	-695 95	-2 59	695 96	0 00	0 00	0 00	0 00
3200 00	90 00	180 21	2649 96	-795 95	-2 96	795 96	0.00	0 00	0 00	0 00
3300 00	90 00	180 21	2649 96	-895 95	-3 33	895 96	0 00	0 00	0 00	0 00
3400 00	90 00	180 21	2649 96	-995 95	-3 70	995 96	0 00	0 00	0 00	0 00
3500 00	90 00	180 21	2649 96	-1095 95	-4.07	1095 96	0 00	0.00	0.00	0 00
3600 00	90 00	180 21	2649 96	-1195 95	-4 44	1195 96	0 00	0 00	0 00	0 00
3700 00	90 00	180 21	2649 97	-1295 95	-4 81	1295 96	0 00	0 00	0 00	0 00
3800 00	90 00	180 21	2649 97	-1395 95	-5 19	1395 96	0.00	0 00	0 00	0 00
3900 00	90.00	180 21	2649 97	-1495 95	-5 56	1495 96	0 00	0 00	0 00	0 00
4000 00	90 00	180 21	2649 97	-1595 95	-5 93	1595 96	0 00	0 00	0 00	0 00
4100 00	90 00	180 21	2649 97	-1695 95	-6 30	1695 96	0 00	0 00	0 00	0 00
4200 00	90 00	180 21	2649 97	-1795.95	-6 67	1795 96	0 00	0 00	0 00	0 00
4300 00	90 00	180 21	2649 97	-1895 94	-7 04	1895 96	0 00	0 00	0 00	0 00
4400 00	90 00	180 21	2649 97	-1995 94	-7 42	1995 96	0 00	0 00	0 00	0 00
4500 00	90 00	180 21	2649 97	-2095 94	-7.79	2095 96	0 00	0 00	0 00	0 00
4600 00	90 00	180 21	2649 97	-2195 94	-8 16	2195 96	0 00	0 00	0 00	0 00
4700 00	90 00	180 21	2649 98	-2295 94	-8 53	2295 96	0 00	0 00	0 00	0 00
4800 00	90 00	180 21	2649 98	-2395 94	-8 90	2395 96	0 00	0 00	0.00	0 00
4900 00	90 00	180 21	2649 98	-2495 94	-9 27	2495 96	0 00	0 00	0 00	0.00
5000 00	90 00	180 21	2649 98	-2595 94	-9 64	2595 96	0 00	0 00	0 00	0 00
5100 00	90 00	180 21	2649 98	- 2695.94	-10 02	2695 96	0 00	0 00	0 00	0 00
5200 00	90 00	180 21	2649 98	-2795.94	-10.39	2795 96	0 00	0 00	0 00	0 00
5300 00	90.00	180 21	2649 98	-2895 94	-10 76	2895 96	0 00	0 00	0 00	0 00
5400 00	90 00	180 21	2649 98	-2995 94	-11 13	2995 96	0 00	0 00	0 00	0 00
5500 00	90 00	180 21	2649 98	-3095 94	-11 50	3095 96	0 00	0 00	0 00	0 00
5600 00	90 00	180 21	2649 99	-3195 94	-11 87	3195 96	0 00	0 00	0 00	0 00
5700 00	90 00	180 21	2649 99	-3295 94	-12 24	3295 96	0 00	0 00	0 00	0 00
5800 00	90 00	180 21	2649.99	-3395 93	-12 62	3395 96	0 00	0 00	0 00	0 00
5900 00	90 00	180 21	2649 99	-3495 93	-12 99	3495 96	0 00	0 00	0 00	0 00
6000 00	90 00	180 21	2649 99	-3595 93	-13 36	3595 96	0 00	0 00	0 00	0 00
6100 00	90 00	180 21	2649 99	-3695.93	-13 73	3695 96	0 00	0 00	0 00	0 00
6200 00	90 00	180 21	2649 99	-3795 93	-14 10	3795 96	0 00	0 00	0 00	0 00
6300 00	90 00	180 21	2649 99	-3895.93	-14 47	3895 96	0 00	0 00	0 00	0 00
6400 00	90 00	180 21	2649 99	-3995 93	-14.85	3995 96	0 00	0 00	0 00	0 00
6500 00	90 00	180 21	2649 99	-4095 93	-15 22	4095 96	0 00	0 00	0 00	0 00
6600 00	90 00	180 21	2650 00	-4195 93	-15.59	4195 96	0 00	0 00	0 00	0 00
6700 00	90 00	180 21	2650 00	-4295 93	-15 96	4295 96	0 00	0 00	0 00	0 00
6800 00	90 00	180 21	2650 00	-4395 93	-16 33	4395 96	0 00	0 00	0 00	0 00
6900 00	90 00	180 21	2650 00	-4495 93	-16 70	4495 96	0 00	0 00	0 00	0 00
6980 07	90 00	180 21	2650 00	-4576 00	-17 00	4576 03	0 00	0 00	0 00	0 00

MD	Incl	Azim	TVD	+Ñ/-S	+E/-W	Map Northing	Map Easting	< Lát Deg Min	itude> Sec	< Lon Deg Min	gitude> Sec
ft	dèg	deg	ft	ft	ft) ft	ft	•	V .		
2077 00	0 00	0 00	2077 00	0.00	0 00	585175 00	459246 00	32 36	30 282 N	104 35	59 758 W
2100 00	2 30	180 21	2099.99	-0 46	0 00	585174 54	459246 00	32 36	30 277 N	104 35	59 758 W
2150 00	7 30	180 21	2149 80	-4 64	-0 02	585170 36	459245.98	32 36	30 236 N	104 35	59 758 W
2200 00	12 30	180 21	2199 06	-13 15	-0 05	585161 85	459245 95	32 36	30 152 N	104 35	59 758 W
2250 00	17 30	180 21	2247 38	<i>-</i> 25 92	-0 10	585149 08	459245 90	32 36	30 025 N	104 35	59 759 W
2300 00	22.30	180 21	2294 41	- 42 85	-0 16	585132 15	459245 84	32 36	29.858 N	104 35	59 759 W
2350 00	27 30	180 21	2339.79	-63 82	-0 24	585111 18	459245 76	32 36	29 650 N	104 35	59 759 W
2400 00	32 30	180 21	2383 16	-88 66	-0 33	585086 34	459245 67	32 36	29 404 N	104 35	59 759 W
2450 00	37 30	180 21	2424 21	-117.18	-0 44	585057 82	459245 56	32 36	29 122 N	104 35	59 760 W
2500 00	42 30	180 21	2462 61	-149 18	-0 55	585025 82	459245 45	32 36	28 806 N	104 35	59 760 W
2550 00	47 30	180 21	2498 08	-184 40	-0 69	584990 60	459245 31	32 36	28.457 N	104 35	59 761 W
2600 00	52 30	180 21	2530 34	-222 58	-0.83	584952 42	459245 17	32 36	28 079 N	104 35	59 761 W
2650 00	57 30	180 21	2559 15	-263 42	-0 98	584911 58	459245 02	32 36	27 675 N	104 35	59 762 W
2700 00	62 30	180 21	2584 29	-306 62	-1 14	584868 38	459244 86	32 36	27.248 N	104 35	59 763 W
2750 00	67 30	180 21	2605 58	-351 85	-1 31	584823 15	459244 69	32 36	26 800 N	104 35	59 763 W

Planning Report - Geographic

Company: Nearburg Producing Company Eddy County, New Mexico Huber "3" Fed #3H

#3H

Site: Well: Wellpath: Lateral 1r0

6980 07

90 00

180 21

2650 00

-4576.00

-17 00

580599 00

459229 00

Date: 06/11/2010 Time: 10 11 56 Co-ordinate(NE) Reference: Well #3H, Grid North

Vertical (TVD) Reference:

Section (VS) Reference:

VVIII #311, Sild Notiti SITE 0 0 Well-(0 00N,0 00E,180 21Azı) Lateral 1r0

Page:

32 35 45 000 N 104 35 59 823 W

3

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Lat Deg Min	itude> ` Sec	< Lo Deg Mi	ngitude n Sec
800.00	72 30	180 21	2622 83	-398 76	-1 48	584776 24	459244 52	32 36	26 336 N	104 35	59 764 \
850 00	77 30	180 21	2635 94	-446 99	-1 66	584728 01	459244.34	32 36	25 859 N	104 35	
900 00	82 30	180.21	2644 79	-496 19	-1 84	584678 81	459244 16	32 36	25 372 N	104 35	
950 00	87 30	180 21	2649 32	-545 96	-2 03	584629.04	459243 97	32 36	24 879 N	104 35	
976 99	90 00	180 21	2649 96	-572 95	-2 13	584602 05	459243 87	32 36	24 612 N	104 35	
000 00	90 00	180 21	2649 96	-595 95	-2 21	584579 05	459243 79	32 36	24 385 N	104 35	59 767
100 00	90 00	180 21	2649 96	-695 95	-2 59	584479 05	459243 41	32 36	23 395 N	104 35	59 768
200 00	90 00	180.21	2649 96	-795 95	-2 96	584379 05	459243.04	32 36	22 405 N	104 35	59 769 1
300 00	90 00	180 21	2649.96	-895 95	-3 33	584279 05	459242 67	32 36	21 416 N	104 35	59 771 \
400.00	90 00	180 21	2649.96	-995 95	-3 70	584179 05	459242 30	32 36	20 426 N	104 35	59 772
500 00	90 00	180 21	2649 96	-1095 95	-4 07	584079 05	459241.93	32 36	19 437 N	104 35	59 774 \
600 00	90 00	180 21	2649 96	-1195 95	-4 44	583979 05	459241 56	32 36	18 447 N	104 35	
700 00	90 00	180 21	2649 97	-1295 95	-4 81	583879 05	459241 19	32 36	17 458 N	104 35	
800 00	90 00	180 21	2649 97	-1395 95	- 5 19	583779 05	459240.81	32 36	16 468 N	104 35	
900 00	90 00	180 21	2649 97	-1495 95	-5.56	583679 05	459240 44	32 36	15 479 N	104 35	59 779
000 00	90 00	180 21	2649 97	-1595 95	-5 93	583579 05	459240 07	32 36	14 489 N	104 35	
100 00	90 00	180 21	2649 97	-1695 95	-6 30	583479 05	459239.70	32 36	13 500 N	104 35	
200 00	90 00	180 21	2649 97	-1795 95	-6 67	583379 05	459239 33	32 36	12 510 N	104 35	
300 00	90 00	180 21	2649 97	-1895 94	-7 04	583279 06	459238 96	32 36	11 521 N	104 35	
1400 00	90 00	180 21	2649 97	-1995 94	-7 42	583179 06	459238 58	32 36	10 531 N	104 35	59 786
500 00	90 00	180 21	2649 97	-2095 94	-7 79	583079 06	459238 21	32 36	9 542 N	104 35	
600 00	90 00	180 21	2649 97	-2195 94	-8 16	582979 06	459237 84	32 36	8.552 N	104 35	
700 00	90 00	180 21	2649 98	-2295 94	-8 53	582879 06	459237 47	32 36	7 562 N	104 35	
1800 00	90 00	180 21	2649 98	-2395 94	-8 90	582779 06	459237 10	32 36	6 573 N	104 35	
1900 00	90 00	180 21	2649 98	-2495 94	-9 27	582679 06	459236 73	32 36	5 583 N	104 35	59 793
000 00	90 00	180 21	2649 98	-2595 94	-9.64	582579 06	459236 36	32 36	4 594 N	104 35	
100 00	90 00	180 21	2649 98	-2695 94	-10 02	582479 06	459235 98	32 36	3 604 N	104 35	
5200 00	90 00	180 21	2649 98	-2795 94	-10 39	582379 06	459235 61	32 36	2 615 N	104 35	
300 00	90 00	180 21	2649 98	-2895 94	-10 76	582279 06	459235 24	32 36	1 625 N	104 35	
5400 00	90 00	180 21	2649 98	-2995 94	-11 13	582179 06	459234 87	32 36	0 636 N	104 35	59 801
500 00	90 00	180 21	2649 98	-3095 94	-11 50	582079 06	459234 50	32 35	59 646 N	104 35	
600 00	90 00	180 21	2649 99	-3195.94	-11 87	581979 06	459234 13	32 35	58 657 N	104 35	
5700 00	90 00	180 21	2649 99	-3295 94	-12 24	581879 06	459233 76	32 35	57 667 N	104 35	
800 00 900 00	90 00 90 00	180 21 180 21	2649 99 2649 99	-3395 93 -3495 93	-12 62 -12 99	581779 07 581679 07	459233 38 459233 01	32 35 32 35	56 678 N 55 688 N	104 35 104 35	
5000 00 5100 00	90 00 90 00	180 21 180 21	2649 99 2649 99	-3595 93	-13 36 -13 73	581579 07	459232 64	32 35	54 698 N	104 35 104 35	
3100 00 3200 00	90 00	180 21	2649 99 2649 99	-3695 93		581479 07	459232 27	32 35	53 709 N		
3200 00 3300 00	90 00	180 21	2649 99 2649 99	-3795 93 -3895 93	-14 10 -14 47	581379 07	459231 90	32 35 32 35	52 719 N 51 730 N	104 35 104 35	
6400 00	90 00	180 21	2649 99 2649 99	-3895 93 -3995 93	-14 47 -14 85	581279 07 581179 07	459231 53 459231 15	32 35 32 35	51 730 N 50 740 N	104 35	
500 00	90 00	180 21	2649 99	-4095 93	-15 22	581079 07	459230 78	32 35	49 751 N	104 35	5 59 816
600 00	90 00	180 21	2649 99 2650 00	-4095 93 -4195 93	-15 22 -15 59	581079 07	459230 78	32 35	49 751 N 48 761 N	104 35	
3700 00	90 00	180 21	2650 00	-4195 93 -4295 93	-15 59 -15 96	580979 07	459230 41	32 35	46 761 N 47 772 N	104 35	
800 00	90 00	180 21	2650 00	-4295 93 -4395 93	-16 33	580779.07	459230 04	32 35	46 782 N	104 35	
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Planning Report - Geographic

Company: Nearburg Producing Company Field: Eddy County, New Mexico Site: Huber "3" Fed #3H

#3H

Date: 06/11/2010 Time: 10 11 56
Co-ordinate(NE) Reference: Well #3H, Grid North
Vertical (TVD) Reference: SiTE 0 0
Section (VS) Reference: Well (0 00N,0 00E,180.21Azi)
Plan: Lateral 1r0

Page:

Targets

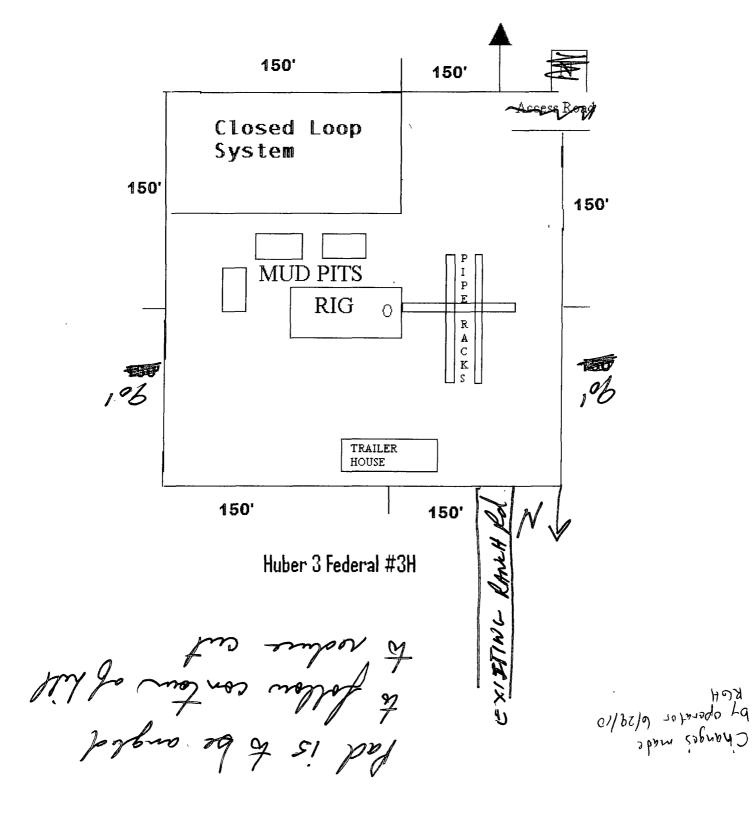
Wellpath: Lateral 1r0

Well:

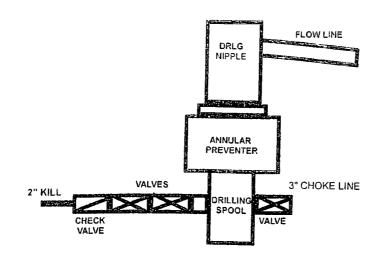
Name	Description Dip.	ı Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec
PBHL - Lateral			2650 00	-4576 00	-17 00	580599 00	459229 00	32 35 45 000 N	104 35 59 823 W

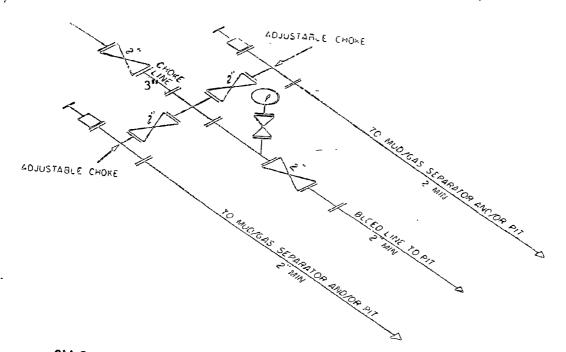
Annotation

MD ft	TVD ft		
2077 00	2077 00	KOP, Build 10 00°/100'	٦
2976 99	2649 96	Hold 90 00°, 180 21° Azimuth	-
6980 07	2650 00	PBHL - Lateral	

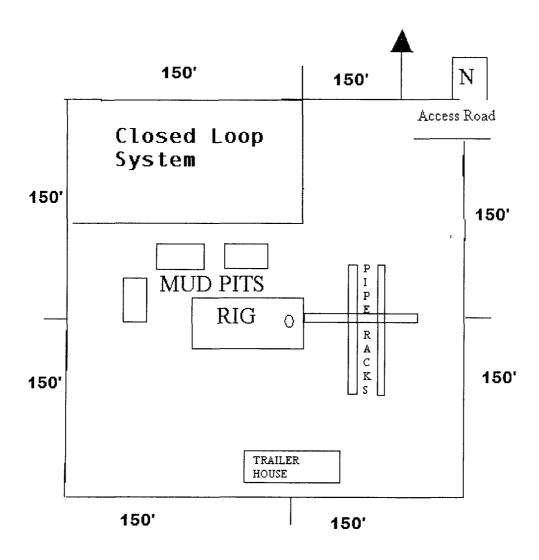


2M SYSTEM

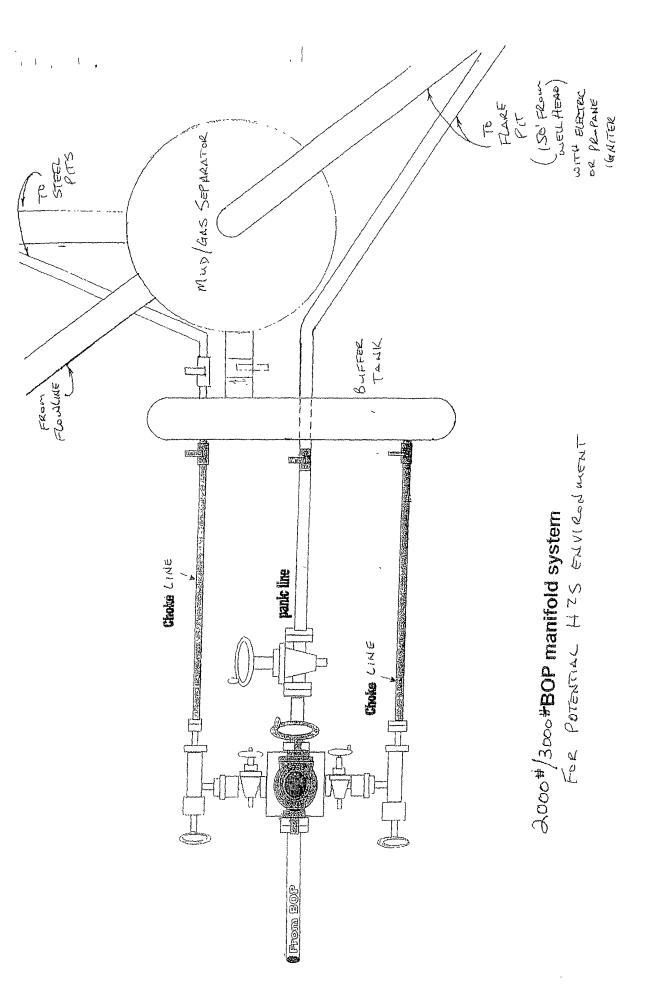


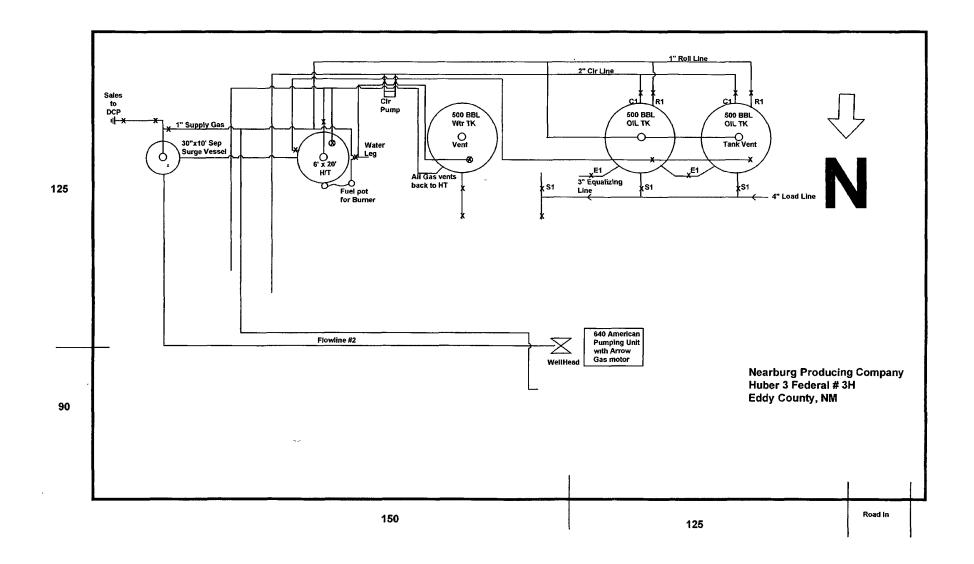


2M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES



Huber 3 Federal #3H





HYDROGEN SULFIDE DRILLING OPERATIONS PLANS NEARBURG PRODUCING COMPANY HUBER 3 FEDERAL #3H

1. HYDROGEN SULFIDE TRAINING

- A. All regularly assigned personnel, contracted or employed by Nearburg Producing Company, will receive training from a qualified instructor in the following areas prior to commencing drilling potential hydrogen sulfide bearing formations in this well:
 - 1. The hazards and characteristics of hydrogen sulfide (H2S).
 - 2. The proper use and maintenance of personal protective equipment and life support systems.
 - 3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
 - 4. The proper techniques for first aid and rescue procedures.
- B. In addition, supervisory personnel will be trained in the following areas:
 - 1. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
 - 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
 - 3. The contents and requirements of the H2S Drilling Operations Plan.
- C. There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

HYDROGEN SULFIDE DRILLING OPERATIONS PLANS PAGE 2

2. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

A. Well Control Equipment:

- 1. Flare line with continuous pilot.
- 2. Choke manifold with a minimum of one remote choke.
- 3. Blind rams and pipe rams to accommodate all sizes with properly sized closing unit.
- 4. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head and flare gun with flares as needed.

B. Protective Equipment for Essential Personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.

C. H2S Detection and Monitoring Equipment:

- 1. Two portable H2S monitors positioned and location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- 2. One portable SO2 monitor positioned near flare line.

D. Visual Warning systems:

- 1. Wind direction indicators as shown on well site diagram.
- 2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate. See example attached.

HYDROGEN SULFIDE DRILLING OPERATIONS PLANS PAGE 3

E. Mud Program

- 1. The Mud Program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weights, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
- 2. A mud-gas separator will be utilized as needed.

F. Metallurgy

All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and line and valves shall be suitable for H2S service.

G. Communication

- 1. Cellular telephone communications in company vehicles and mud logging trailer.
- 2. Land line (telephone) communications at area office.

H. Well Testing

Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing in an H2S environment will be conducted during the daylight hours.

NEARBURG PRODUCING COMPANY H2S CONTINGENCY PLAY EMERGENCY CONTACTS (Alexand & Planta & Land & Alexandra & Contact &

(Name & Phone Numbers Must be Verified)

NPC Office Emergency Phone Number	432/686-8235 432/686-8235 x 500
NPC Contact Personnel	
Butch Willis, Drilling Manager	432/312-1911
Matt Lee, Production Superintendent	575/365-6662
Roger King, Production Foreman	575/361-3605
Artesia	
Ambulance	911
NM State Police	575/746-2703
City Police	575/746-2703
Sheriff's Office	575-746-9888
Fire Department	575-746-2701
Local Emergency Planning Committee	575-746-2122
NMOCD (Artesia)	575-748-1283
Carlsbad	
Ambulance	911
NM State Police	575-885-3137
City Police	575/885-2111
Sheriff's Office	575-887-7551
Fire Department	575/887-3798
Local Emergency Planning Committee	575-887-6544
BLM	575-887-6544
NM Emergency Response Commission (Santa Fe)	505/476-9600
24 Hour	505/827-9126
NM State Emergency Operations Center	505/476-9635
National Emergency Response Center (Washington, DC)	800/424-8802
Other	
Boots & Coots IWC	800/256-9688 or 281/934-8884
Cudd Pressure Control	432/699-0139 or 432/563-3356
Hallıburton	575/746-2757
BJ Services	575/746-3569
Flight for Life - 4000 24th St Lubbock, TX	806/746-9911
Aerocare - R3, Box 49F, Lubbock, TX	806/747-8923
Med Flight Air Amb - 2301 Yale Blvd SE #d#, Albuq., NM	505/842-4433
S B Aid Med Service - 2505 Clark Carr Loop Se, Albuq, NM	505/842-4949

NEARBURG PRODUCING COMPANY HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'
100 ppm H2S concentration shall trigger activation of this plan

Emergency Procedures

In the event of a release of gas containing H2S, the first responder(s) must

Isolate the area and prevent entry by other persons into the 1000 ppm ROE.

Evacuate any public places encompassed by the 100 ppm ROE.

Be equipped with H2S monitors and air packs in order to control the release.

Use the "buddy system" to ensure no injuries occur during the response.

Take precautions to avoid personal injury during this operation.

Contact operator and/or local officials to aid in operation. See list of phone numbers attached.

Have received training in the

Detection of H2S, and

Measures for protection against the gas,

Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H2S and SO2.

Common	Chemical	Specific	Threshold	Hazardous	Lethal Concentration
Name	Formula	Gravity	Limit	Limit	
Hydrogen	H2S	1.189	10 ppm	100 ppm/ hr	600 ppm
Sulfide		Air = 1			
Sulfur	SO2	2.21	2 ppm	N/A	1000 ppm
Dioxide		Air = 1			

Contacting Authorities

Nearburg Producing Company's personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Nearburg Producing Company's response must be in coordination with the State of NM's "Hazardous Materials Emergency Response Plan" (HMER).

SURFACE USE AND OPERATIONS PLAN FOR

DRILLING, COMPLETION, AND PRODUCING

NEARBURG PRODUCING COMPANY HUBER 3 FEDERAL #3H 330 FNL AND 660 FEL, SEC 3, 20S, 25E EDDY COUNTY, NEW MEXICO

LOCATED

5 miles SW of Lakewood

OIL & GAS LEASE

NMNM14758

RECORD LESSEE

Robert L. Lindgren

BOND COVERAGE

\$25,000 statewide bond of Nearburg Producing Company

ACRES IN LEASE

1442.36

GRAZING LEASE

Ronald Houghtaling PO Box 1611 Artesia, NM 88210

POOL

Cemetary; Yeso

EXHIBITS

- A. Area Road Map
- B. Drilling Rig Layout
- C. Vicinity Oil & Gas Map
- D. Topographic & Location Verification Map
- E. Well Location & Acreage Dedication Map

This well will be drilled to a depth of approximately 7000'.

HUBER 3 FEDERAL #3

Page 2

1. EXISTING ROADS

- A. Exhibit A is a portion of a section map showing the location of the proposed well as staked.
- B. Exhibit C is a plat showing existing roads in the vicinity of the proposed well site.

2. ACCESS ROADS

A. Length and Width

The access road will be built and is shown on Exhibit D.

B. Surface Material

Existing.

C. Maximum Grade

Less than five percent

D. <u>Turnouts</u>

None necessary.

E. Drainage Design

Existing.

F. Culverts

None necessary.

G. Gates and Cattle Guards

None needed.

3. <u>LOCATION OF EXISTING WELLS</u>

Existing wells in the immediate area are shown in Exhibit C.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Necessary production facilities for this well will be located on the well pad.

HUBER 3 FEDERAL #3

Page 4

C. Flora and Fauna

The location is in an area sparsely covered with mesquite and range grasses.

D. Ponds and Streams

There are no rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures

There are no residences within a mile of the proposed well site.

F. Archaeological, Historical, and Cultural Sites

None observed on this area.

G. Land Use

Grazing

H. Surface Ownership

BLM (USA)

11. OPERATOR'S REPRESENTATIVE

H. R. Willis 3300 North "A" Street, Bldg 2, Suite 120

Midland, Texas 79705 Office: (432) 686-8235 Home: (432) 697-2484

12. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Nearburg Producing Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

6.17.10

Date

H. R. Willis

Drilling Manager

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
Nearburg Producing Co
NM14758
3H Huber 3 Federal
330' FSL & 660' FEL
Section 3, T. 20S., R 25 E., NMPM
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.

Па .ъ
General Provisions
Permit Expiration
☐ Archaeology, Paleontology, and Historical Sites
☐ Noxious Weeds
Special Requirements
Pad restriction
Cave/Karst
Construction
Notification
V-Door Direction
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
☐ Road Section Diagram
☑ Drilling
High Cave/Karst
Logging Requirements
Waste Material and Fluid
Production (Post Drilling)
Well Structures & Facilities
Pipelines
Electric Lines
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. SPECIAL REQUIREMENT(S)

Pad restriction

Limit pad size to 90 feet to northwest from center hole in order to limit cut

Cave and Karst

** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad. All sides will be bermed.

Tank Battery Liners and Berms:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:

Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cavebearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Page 5 of 18

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) 234-5972 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. V-DOOR DIRECTION: southwest

C. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 5 inches in depth. The topsoil will be used for interim and final reclamation.

D. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

E. 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.

F. 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.

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 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

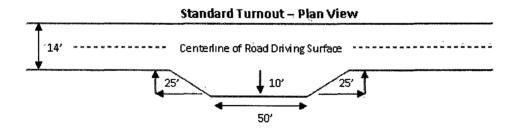
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

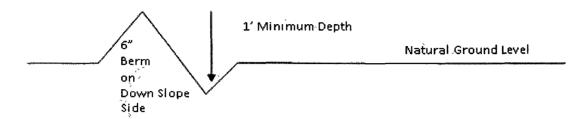


Drainage

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 foot road with 4% road slope:
$$\frac{400'}{4\%}$$
 + 100' = 200' 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.

furnaut 10' transition
Intervisible turnouts shall be constructed on all sing's lone roads on all blind curves with additional turnouts as needed to keep spacing below 1000 feet. 1001 full turnout width **Typical Turnout Plan** height of fill at shoulder embankment - 2* crown s^tope 3.1 **Embankment Section** 03 - 05 h/h earth surface aggregate surfa .02 - .04 h/h .02 - .03 ft/ft paved surface Depth measured from the bottom of the ditch **Side Hill Section** travel surface (slope 2 - 4%)

Figure 1 – Cross Sections and Plans For Typical Road Sections

Typical Inslope Section

Typical Outsloped Section

VII. 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

Eddy County

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

- 1. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts 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. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) will 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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

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. 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.

HIGH CAVE/KARST – CONTINGENCY CASING WILL BE REQUIRED IF LOST CIRCULATION OCCURS WHILE DRILLING THE SURFACE HOLE. THE SURFACE HOLE WILL HAVE TO BE REAMED AND A LARGER CASING INSTALLED.

Possible lost circulation in the San Andres formation.

- 1. The 8-5/8 inch surface casing shall be set at approximately 825 feet and cemented to the surface. Additional cement may be required as the excess cement calculates to 17%.
 - 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 5-1/2 inch production casing is:
 - Cement to surface from DV tool at KOP. If cement does not circulate, contact the appropriate BLM office. The lateral will utilize a packer assembly.
- 3. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
 - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 3. 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 or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug or when the cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. BOP/BOPE testing can begin after the above conditions are satisfied.
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) prior to initiating the test.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. 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.
 - e. 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.

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.

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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.

Containment Structures

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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

- B. PIPELINES
- C. ELECTRIC LINES

IX. INTERIM RECLAMATION

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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

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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 1, for Loamy Sites

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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 <u>no</u> 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 regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/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>
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0

^{*}Pounds of pure live seed:

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