Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

	Expires: July 31,	
Lease	Serial No.	

L	Expues. July
5.	Lease Serial No.
1	NIMANIMAAAAA

	NOTICES AND REPOR				NMNM108970	
Do not use thi abandoned we	is form for proposals to o	ariii or to re-)) for such p	enter an roposals.		6. If Indian, Allottee or	Tribe Name
SUBMIT IN TRI	PLICATE - Other instruct	tions on reve	erse side.		7. If Unit or CA/Agree	ment, Name and/or No.
Type of Well	ner		1		8. Well Name and No. FEARLESS BSF F	FEDERAL COM 2H ,
Name of Operator YATES PETROLEUM CORPO	Contact: NORATIONE-Mail: NSAIZ@YA	NAOMI G SA ATESPETROLE	Z EUM.COM		9. API Well No. 30-025-42110-0	0-X1
3a. Address 105 SOUTH FOURTH STREE ARTESIA, NM 88210	ET	3b. Phone No. Ph: 575-748	(include area B-4211 HOB	SOCD	10. Field and Pool, or I WC-025 G08 S2	
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description)	,	· ADD	27 2015	11. County or Parish, a	and State
Sec 26 T25S R32E NENE 020 32.062951 N Lat, 103.381851		-			LEA COUNTY, I	MM
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE	0	CEIVED NOTICE, RI	EPORT, OR OTHER	R DATA
TYPE OF SUBMISSION			ТҮРЕ С	F ACTION		
D Nation Clares	☐ Acidize	☐ Deep	en	☐ Product	ion (Start/Resume)	☐ Water Shut-Off
☑ Notice of Intent	☐ Alter Casing	☐ Frac	ure Treat	☐ Reclam	ation	☐ Well Integrity
☐ Subsequent Report	□ Casing Repair	□ New	Construction	□ Recomp	olete	Other
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug	and Abandon	□ Tempor	arily Abandon	Change to Original A PD
	☐ Convert to Injection	Plug	Back	■ Water I	Disposal	
Attach the Bond under which the worfollowing completion of the involved testing has been completed. Final Al determined that the site is ready for for Yates Petroleum Corporation as per the attached paperworld Thank you.	l operations. If the operation respondonment Notices shall be file inal inspection.) respectfully request to characteristics.	ults in a multiple d only after all r ange our driffi	e completion or rec equirements, inclu	completion in a ding reclamation	new interval, a Form 3160 n, have been completed, a	20-4 shall be filed once and the operator has
14. I hereby certify that the foregoing is	strue and correct		<u> </u>		BUREAU OF LAND	MANAGERICE IELD OFFICE
,	Electronic Submission #2 For YATES PETR mmitted to AFMSS for prod	OLEUM COR	OŘATION, sen	t to the Hobb	s\	Va
Name (Printed/Typed) NAOMI G	SAIZ		Title WELL	PLANNING '	TECH	100
Signature (Electronic	Submission)		Date 04/22/	2015	· :	
Cignature (Electronic)	THIS SPACE FO	R FEDERA			SF	
	THIS STAGE TO		LONGIAIL	. 51 1100 0	<u> </u>	
_Approved By_EDWARD FERNAN			TitlePETROL	EUM ENGIN	EER	Date 04/24/2015
Conditions of approval, if any, are attache certify that the applicant holds legal or eq which would entitle the applicant to conditions.	uitable title to those rights in the		Office Hobbs			
Title 18 U.S.C. Section 1001 and Title 43 States any false fictitious or fraudulent					ake to any department or	agency of the United

Fearless BSF Federal Com #2H

Yates Petroleum Corporation respectfully requests to make the following changes to the approved APD:

Primary Intermediate Cement Design:

Lead w/1330sx 35/65 PozC (YLD 2 WT 12.5, 11 gal/sk) Tail w/210sx Class C (YLD 1.34 WT 14.8, 6.23 gal/sk) TOC=0'. Excess calculated at 100%.

The approval of a contingency intermediate cement is requested if hole conditions warrant:

DV/Packer Stage tool will be placed at approx. 3000'-3500' (cement volumes will be adjusted per tool placement)

Stage I: Lead w/390sx 35/65 PozC (YLD 2 WT 12.5, 11 gal/sk) tail w/210sx Class C (YLD 1.34 WT 14.8, 6.23 gal/sk) 100% excess TOC=3000'

Stage II: Lead w/800sx 35/65 PozC (YLD 2 WT 12.5, 11 gal/sk) tail w/210sx Class C (YLD 1.34 WT 14.8, 6.23 gal/sk) 100% excess TOC=0'

Production: TVD's will be as shown below

Well will be kicked off at approx. 10,407' and directionally drilled at 12 degrees per 100' with an 8 ¾" bit to approx. 11,157' MD (10,885' TVD). Lateral will then be drilled with an 8 ½" bit to approx. 15,430' MD (10,885' TVD). Casing weight and grade will remain the same.

Primary Production Cement:

It is requested to cement the production string in a single stage as follows:

Lead w/ 695sx LiteCrete (YLD 2.85, WT 9.5, 8.9 gal/sk) Tail w/1260sx PVL (YLD 1.36, WT 13.5, 6.3 gal/sk) TOC approx. 4200'. Excess calculated at 35%.

Production Cement Contingency:

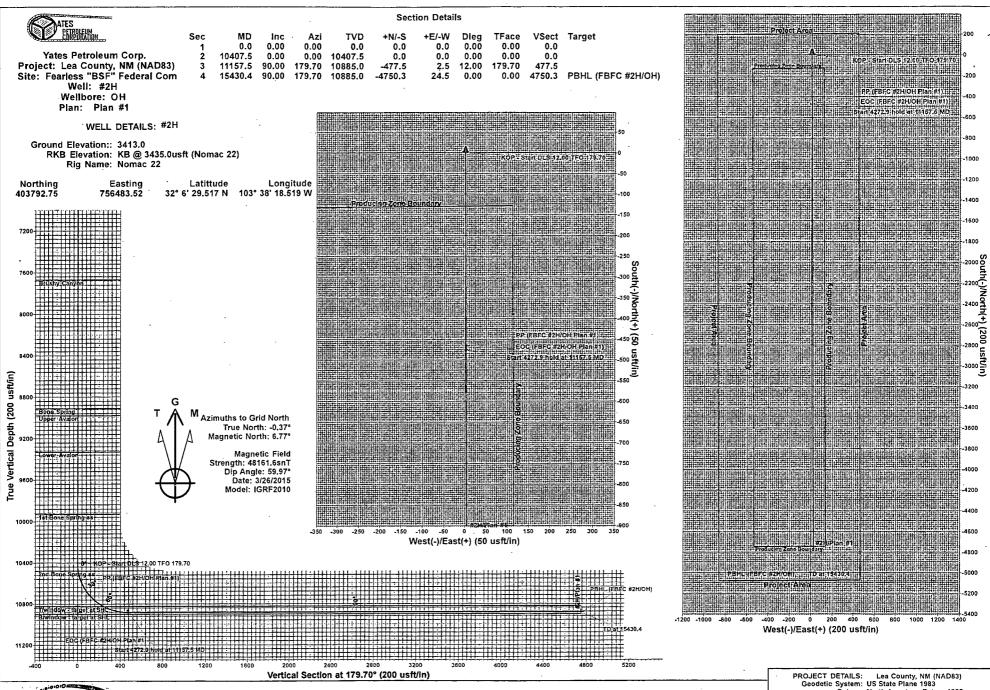
The approval of the following 2 stage cement contingency is requested if hole conditions warrant:

DV/Packer stage tool will be placed at approx. 9,500'-10,000' (cement will be adjusted per tool placement)

Stage I: Lead w/1260sx PVL(YLD 1.36, WT 13.5, 6.3 gal/sk) TOC= approx. 10,000'

Stage II: Lead w/820sx 35/65 PozC (YLD 2 WT 12.5, 11 gal/sk) Tail w/205sx Class C (YLD 1.34 WT 14.8, 6.23 gal/sk)

Excess calculated at 35%. Casing weight and grade will remain the same. TOC= approx. 4,400'



Terra Directional Services LLC 322 Spring Hill Drive, Suite A300. Spring, Tx 77386 Phone: 432-425-7532

Datum: North American Datum 1983 Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone System Datum: Mean Sea Level Local North: Grid



Yates Petroleum Corp.

Lea County, NM (NAD83)
Fearless "BSF" Federal Com
#2H

ОН

Plan: Plan #1

Standard Planning Report

30 March, 2015







EDM 5000.1 Single User Db Database: Local Co-ordinate Reference: Yates Petroleum Corp. Company: TVD Reference: Project: Lea County, NM (NAD83) MD Reference: Site: Fearless "BSF" Federal Com North Reference: Well:∶

Survey Calculation Method:

Well #2H KB @ 3435.0usft (Nomac 22) KB @ 3435.0usft (Nomac 22)

Grid

Minimum Curvature

Lea County, NM (NAD83) Project:

OH,

Plan #1

Map System: Geo Datum:

Wellbore: Design:

> US State Plane 1983 North American Datum 1983

System Datum:

Mean Sea Level

New Mexico Eastern Zone Map Zone:

Site ./ Fearless "BSF" Federal Com Site Position: 403,792,75 usft 32° 6' 29.517 N Easting: 103° 38' 18.519 W From: Map 756,483.52 usft Longitude: Slot Radius: Grid Convergence: Position Uncertainty: 0.0 usft 13-3/16" 0.37

#2H Well Position +N/-S 0.0 usft Northing: 403,792.75 usft 32° 6' 29,517 N +E/-W 0.0 usft Easting: 756,483.52 usft Longitude: 103° 38' 18,519 W 0.0 usft Wellhead Elevation: Position Uncertainty 0.0 usft Ground Level: 3,413.0 usft

OH Wellbore Sample Date Magnetics Model Name Declination Dip Angle Field Strength (nT) 14 (°) (°) IGRF2010 3/26/2015 7.14 59.97

Plan #1 Design **Audit Notes:** PLAN Tie On Depth: 0.0 Version: Phase: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°). 0.0 0.0 0,0 179.70

Neasured			Vertical			Dogleg	Build	Turn		
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)	TFO (°)	Target
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Site:

TDS Planning Report



EDM 5000.1 Single User Db Yates Petroleum Corp. Database: " Company: Project:

Lea County, NM (NAD83) Fearless "BSF" Federal Com

Well: #2H Wellbore: OH

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

W≥11#2H

KB @ 3435.0usft (Nomac 22) KB @ 3435.0usft (Nomac 22)

Grid

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Project:

Site:

Planning Report



Database: EDW Company: Yate

EDM 5000.1 Single User Db Yates Petroleum Corp.

Lea County, NM (NAD83)
Fearless "BSF" Federal Com

Well: #2H Wellbore: OH Design: Plan #1 Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #2H

KB @ 3435 Ousft (Nomac 22) KB @ 3435 Ousft (Nomac 22)

Grid

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7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	00.0
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8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0 0.0	0.00	0.00 0.00	0.00 0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	. 0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0,00	0.00
8,910.0	0.00	0.00	8,910.0	0.0	0.0	0.0	0.00	0.00	0.00
Bone Spring	and another than		1				e and the factor	مع فيديوس محديد :	
8,980.0	0.00	0.00	8,980.0	0.0	0.0	0.0	0.00	0.00	0.00





Database: Company: EDM 5000.1 Single User Db

Yates Petroleum Corp. Project: Lea County, NM (NAD83) Fearless "BSF" Federal Com Site:

Well: #2H OH Wellbore: * Plan#1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well#2H

KB @ 3435 Ousft (Nomac 22) KB @ 3435.0usft (Nomac 22)

Grid

				A desired to the second second						
Planned	Survey	The Engage was any	amia aintentine de er entir.	ي. ويوا د المدينجون الطي لا داماري.		ويوود فالعجد ويحافظ أحارمني	رأ يحاص فاصام وجيه	ويجمها فللمراط المعادد وجملك		و فيد تصديد - دروند عروزيد در سرمايوسا - يأسد،
. 18. 33.	100000				Party St.	and the second				· · · · · · · · · · · · · · · · · · ·
	Measured			Vertical			Vertical	Dogleg	Build 🔌	Turn
	Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
	(usft)	(9)	(*)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
					44-19	(4,0,4)				***************************************
	Upper Aval	on								
	9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
	9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	D.CO
	9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0 0.0	0,00 0,00	0.00	0.00
	9,330.0		0,00	9,330.0	0.0	0.0	0.0	0.00	0.00 0.00	0.00 0.00
r	Lower Aval	and the same of the same property and the same of		0,000.0				0,00		0.00
. !		0.00	0,00	0.400.0						
	9,400.0	0.00	00.0	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
	9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
	9,600.0	0.00	0.00	9,600.0	0.0	0.0	0,0	0.00	0.00	0.00
	9,700.0	00.0	0.00	9,700.0	0.0	0.0	. 0.0	0.00	0.00	0.00
	9,800.0	0.00	0.00	9,800.0	0,0	0,0	0.0	0.00	0.00	0.00
	9,900.0	0.00	. 0.00	9,900.0	0.0	0.0	0.0	.00'0	0.00	0.00
	9,930.0	0.00	0.00	9,930.0	0.0	0.0	0.0	0.00	. 0.00	0.00
1	the same of the same of the same of the	make the continuous and			* * * ***			0.00		0.00
l	1st Bone S 10,000.0	0.00	0.00	10,000.0	0.0	n.o.		0.00	0.00	أدر سيد
	10,000.0	0.00	0.00	10,100.0	0.0	0,0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00
	10,100.0	0.00	0.00	10,100.0	0.0	0.0				0.00
	10,200.0	0.00	0.00	10,300.0	0.0	. 0.0	0,0 0.0	0.00	0.00	0.00
							0.0			0.00
	10,407.5		0.00	10,407.5	0.0	0.0	0.0	0.00	0.00	0.00 .
	KOP - Start	DLS 12.00 TFO	179.70		<u> </u>			#1.1 (. m.)	****	
. "	10,425.0	2.10	179.70	10,425.0	-0.3	0.0	0.3	12.00	12.00	0.00
	10,450.0	5.10	179.70	10,449.9	-1.9	0.0	1.9	12.00	12.00	0.00
	10,475.0	8.10	. 179.70	10,474.8	-4.8	0.0	4.8	12.00	12.00	0.00
	10,480.3	8.73	179.70	10,480.0	-5.5	0.0	5,5	12.00	12.00	0.00
1.	2nd Bone S	Spring ss								
	10,500.0	11.10	179.70	10,499.4	-8.9	0.0	8.0	40.00	12.00	n.00
	10,500.0	14.10	179,70	10,523.8	-0.9 -14.4	0.0	8.9 14.4	12.00 12.00	12.00 12.00	0.00 0.00
	10,525.0		179.70	10,525.0	-21,1	0.1	21.1	12.00	12.00	
	10,575.0		179,70	10,571.6	-29.1	0.1	29.1	12.00	12.00	0.00 0.00
	10,573.0		179.70	10,594.8	-38,3	0.2	38.3	12.00	12.00	0.00
	-			·						
	10,625.0		179.70	10,617.6	-48.7	0.3	48.7	12.00	12.00	0.00
	10,650.0	29.10	179.70	10,639.7	-60.3	0.3	60.3	12.00	12.00	0.00
	10,675.0	32.10	179.70	10,661.2	-73.0	0.4	73.0	12.00	12.00	0.00
	10,700.0		179.70	10,682.0	-86.8	0.4	86.8	12.00	12.00	0.00
	10,725.0	38.10	179.70	10,702.1	-101.7	0.5	101.7	12.00	12.00	0.00
	10,750.0		179.70	10,721.4	-117.7	0.6	117.7	12.00	12.00	0.00
	10,775.0	44.10	179.70	10,739.8	-134.6	0.7	134.6	12.00	12.00	0.00
	10,800.0	47.10	179.70	10,757.3	-152.4	8.0	152.4	12.00	12.00	0.00
	10,825.0	50.10	179.70	10,773.8	-171.2	0.9	171.2	12.00	12.00	0.00
	10,850.0	53.10	179.70	10,789.3	-190.8	1.0	190.8	12.00	12.00	0.00
	10,875.0	56.10	179.70	10,803.8	-211.2	1.1	211.2	12.00	12.00	0.00
	10,873.0		179.70	10,817.2	-232,3	· 1.2	232.3	12.00	12.00	0.00
	10,915.6		179.70	10,825.0	-245.8	1.3	245.8	12.00	12.00	0.00
1 -		target at SHL						12.00		
1 4.25	10,925.0		179.70	10,829,5	-254,0	1.3	254.0	12.00	12.00	0.00
	10,925.0		179.70	10,829.5	-254.0 -276.4	1.3	254.0 276.4	12.00	12.00	0.00
	10,950.0	65.10	178.70		-210.4	1.4	210.4	12.00	12.00	0.00
	10,975.0		179.70	10,850.5	-299.4	1.5	299.4	12.00	12.00	0.00
	11,000.0	71,10	179.70	10,859.2	-322.8	1.7	322.8	12.00	12.00	0.00
	11,025.0		179.70	10,866.7	346.7	1.8	346.7	12.00	12.00	0.00
7	11,050.0		179.70	10,872.9	- 370.9	1.9	370.9	12.00	12.00	0.00
	11,075.0	80.10	179.70	10,877.9	-395.4	2.0	395.4	12.00	12.00	0.00
	11,100.0	83,10	179.70	10,881.5	-420.1	2.2	420.1	12.00	12.00	0.00
L	11,100.0	33.10	110,10	10,001.0	720.1	۷.۲	720.1	12.00	12.00	3.00





Database: Company: Project:

Site:

EDM 5000.1 Single User Db

Yates Petroleum Corp. Lea County, NM (NAD83)

Fearless "BSF" Federal Com

Well: #2H Wellbore: OH Design: Plan Local Co-ordinate Reference:

TVD Reference:

North Reference:

Survey Calculation Method:

Well#2H

KB @ 3435.0usft (Nomac 22)

KB @ 3435.0usft (Nomec 22)

Grid

ign:		! Plan#1	utilitie in signature of the strike in a such a series	المستحددية المعتادية المستحددية	} 's				-		سرونية والمارية
nned	Survey		1,7100 - 1,000		1 4 11 1 10 to the said 1 1 1		* * * * * * * * * * * * * * * * * * *	1	Ben A page of up 10 th annual distance of	The second second	
		San San San					e programme and the second	100 A 400	13. X 3. M.		, , ,
[*]	Measured	Super		Vertical			Vertical	Dogleg	Build	Tum	
4.0	Depth'	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rete	Rate	Rate	8.2
	(usft)	(7)	. (Ö	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
	11,125.0	86.10	179.70	10,883.9	-445.0	2.3	445.0	12.00	12.00	0.00	
	11,150.0	89.10	179.70	10,884.9	-470.0	2.4	470.0	12.00	12.00	0.00	
	11,157.5	90.00	179.70	10,885.0	-477.5	2.5	477.5	12.00	12.00	0.00	
	- where her rechested from it is	272.9 hold at 11	at a contrast rate to be a special		re remain me	~				and the second second	1
	11,200.0	90.00	179.70	10,885.0	-520,0	2.7	520.0	0.00	0.00	0.60	
	11,300.0	90.00	179,70	10,885,0	-620,0	3.2	620.0	0.00	0.00	0.00	
	11,400.0	90.00	179.70	10,885.0	-720.0	3.7	720.0	0.00	0.00	0.00	
	11,500.0	90.00	179.70	10,885.0	-820.0	4.2	820.0	0,00	0.00	0.00	
	11,600.0	90.00	179.70	10,885.0	-920.0	4.8		0.00	0.00	0.00	
	11,700.0	90.00	179.70	10,885.0	-1,020.0	5.3	1,020.0	. 0.00	0.00	00.0	
	11,800.0	90.00	179.70	10,885.0	-1,119.9	5.8	1,120.0	0.00	0.00	0.00	
	11,900.0	90.00	179.70	10,885.0	-1,219.9	6.3	1,220.0	. 0.00	0.00	0.00	
	12,000.0	90.00	179.70	10,885.0	-1,319.9	6.8	1,320.0	0.00	0.00	0.00	
	12,100.0	90.00	179,70	10,885.0	-1,419.9	7.3	1,420.0	0.00	0.00	0.00	
	12,200.0	90.00	179.70	10,885.0	-1,519.9	7.9	1,520.0	0.00	0.00	0.00	
	12,300.0	90,00	179.70	10,885.0	-1,619.9	8.4	1,620.0	0.00	0.00	0.00	
	12,400.0	90.00	179.70	10,885.0	-1,719.9	8.9		0.00	0.00	0.00	
	12,500.0	90.00	179.70	10,885.0	-1,819.9	9.4	1,820.0	0.00	0.00	0.00	
	12,600.0	90.00	179.70	10,885.0	-1,919.9	9.9	1,920.0	0.00	0.00	0.00	
	12,700.0	90.00	179.70	10,885.0	-2,019.9	10.4	2,020.0	0.00	0.00	0.00	
	12,800.0	90.00	179.70	10,885.0	-2,119.9	11.0	2,120.0	0.00	0.00	0.00	
	12,900.0	90.00	179.70	10,885.0	-2,219.9	. 11.5	2,220.0	0.00	0.00 0.00	0.00	
	13,000.0	90.00 90.00	179.70 179.70	10,885.0 10,885.0	-2,319.9 -2,419.9	12.0 12.5	2,320.0 2,420.0	00.0 00.0	0.00	0.00	
	13,100.0 13,200.0	90.00	179.70	10,885.0	-2,519.9	13.0	2,520.0	0.00	0.00	0.00	
	13,300.0	90.00	179,70	10,885.0	-2,619.9	13.5	2,620.0	0.00	0,00	0.00	
	13,400.0	90.00	179.70	10,885.0	-2,719.9	14.1	2,720.0	0.00	0.00	0.00	
	13,500.0	90.00	179.70	10,885.0	-2,819.9		2,820.0	0.00	0.00	0.00	
	13,600.0	90.00	179.70	10,885.0	-2,919.9	15.1	2,920.0	0.00	0.00	0.00	
	13,700.0	90.00	179.70	10,885.0	-3,019.9	15.6	3,020.0	0.00	0.00	0.00	
	13,800.0	90.00	179.70	10,885.0	-3,119.9	16.1	3,120.0	0.00	0.00	0.00	٠
	13,900.0	90.00	179.70	10,885.0	-3,219.9	16.6	3,220.0	0.00	0.00	0.00	
	14,000.0	90.00	179.70	10,885.0	-3,319.9	17.2	3,320.0	0.00	0.00	0.00	
	14,100.0	90.00	`179.70	10,885.0	-3,419.9	17.7	3,420.0	0.00	0.00	0.00	
	14,200.0	90.00	179.70	10,885.0	-3,519.9	18.2	3,520.0	0.00	0.00	0.00	
	14,300.0	90.00	179.70	10,885.0	-3,619.9	18.7	3,620.0	0.00	0.00	0.00	
	14,400.0	90.00	179,70	10,885.0	-3,719.9	19.2	3,720.0	0.00	0.00	0.00	
	14,500.0	90,00	179.70	10,885.0	-3,819.9	19.7	3,820.0	0.00	0.00	0.00	
	14,600.0	90.00	179.70	10,885.0	-3,919.9	20.3	3,920.0	0.00	0.00	0.00	
	14,700.0	90,00	179.70	10,885.0	-4,019.9	20.8	4,020.0	0.00	0.00	0.00	
	14,800.0	90.00	179.70	10,885.0	-4,119.9	21.3	4,120.0	0.00	0.00	0.00	
	14,900.0	90.00	179.70	10,885.0	-4,219.9	21.8	4,220.0	0.00	0.00	0.00	
	15,000.0	90.00	179.70	10,885.0	-4,319.9	22.3	4,320.0	0.00	0.00	0.00	
	15,100.0	90.00	179.70	10,885.0	-4,419.9	22.8	4,420.0	0.00	0.00	0.00	
	15,200.0	90.00	179.70	10,885.0	-4,519.9	23.3	4,520.0	0.00	0.00	0.00	
	15,300.0	90.00	179.70	10,885.0	-4,619.9	23.9	4,620.0	0.00	0.00	0.00	
	15,400.0	90.00	179.70	10,885.0	-4,719.9	24.4	4,720.0	0.00	0.00	0.00	
	15,430.4	90.00	179.70	10,885.0	-4,750.3	24.5	4,750.3	0.00	0.00	0.00	





EDM 5000.1 Single User Do Database: Local Co-ordinate Reference: Well #2H Company: Yates Petroleum Corp. TVD Reference: KB @ 3435.0usft (Nomac 22) Project: Lea County, NM (NAD83) MD Reference: North Reference: KB @ 3435.0usft (Nomac 22) Site: 1 Fearless "BSF" Federal Com Grid Well: #2H Survey Calculation Method: ... Minimum Curvature Wellbore: OH Design: Plan #1

Design Targets Target Name - hit/miss target - Shape	Angle	Dip Dir:	TVĎ (usfi)	+N/-S (usft)	+E/-W	Northing (usft)	Easting (usft)	Latitude	Longitude
Target Top (FBFC #2H/C - plan misses target cente - Rectangle (sides W0.0 H			10,825.0 50.0usft MD	0.0 (10721.4 TVD,	0.0 -117.7 N, 0.6 £	403,792.75 E)	756,483.52	32° 6′ 29.517 N	103° 38' 18,519 W
PP (FBFC #2H/OH Plan - plan hits target center - Point	0.00	0.00	10,884.8	-457.0	2.4	403,325.79	756,485.93	32° 6′ 24.896 N	103° 38' 18,526 W
EOC (FBFC #2H/OH Pla - plan hits target center - Point	0.00	0.00	10,885.0	-477.5	2.5	403,315.29	756,485.98	32° 6' 24.793 N	103° 38' 18,526 W
PBHL (FBFC #2H/OH) - plan hits target center - Point	0.00	0.00	10,885.0	-4,750,3	24.5	399,0 42 .48	756,508.06	32° 5′ 42,509 N	103° 38' 18,589 W
Target Bottom (FBFC #2 - plan misses target cente - Rectangle (sides W0.0 F	-		10,900.0 90.9usft MD	0.0 (10751.0 TVD	0.0 , -145.9 N, 0.8 i	403,792.75 E)	756,483.52 ፣	32° 6′ 29.517 N	' 103° 38' 18,519 W

Formations	e'har den'ne finine are en reserve	and a real property of a contract of the contr	and the second	and the state of t
Méas Dep (us	th	Vertical Depth (usft)	Name	Dip Direction Lithològy (°) (°)
arten en detaile au perspectual au fante uit en bleedend as steam, au apples de	730.0	730.0	Rustler	0.00
1,	0.080	1,080.0	Salado	0.00
3,	030.0	3,030.0	Castile	0.00
. 4,	530.0	4,530.0	Base of Salt	0.00
4,	790.0	4,790.0	Delaware	0.00
5	790.0	5,790.0	Cherry Canyon	0.00
7.	670.0	7,670.0	Brushy Canyon	0,00
8	910.0	8,910.0	Bone Spring	0.00
8	980.0	8,980.0	Upper Avalon	0.00
9	330.0	9,330.0	Lower Avalon	0.00
9	930.0	9,930.0	1st Bone Spring ss	0.00
10	480.3	10,480.0	2nd Bone Spring ss	0.00
10	915.6	10,825.0	T/window - target at SHL	0.00

Plan Annotation	ns.	and Andreas in the second	en mag ar ar har har haran gar an an angarang man har har na mag ar ar har haran har na an angarang man har har	a de la persona de la composição de la c	er od der penillande er ber i de e ernem i jedige bygene var de e	galari agramaning na is an ar ana ang ara	a de la companya de l	mana yan mana ayan	and the same of the state of the same of t
	Measured Depth (usft)	Vertical Depth (usft)	Local Coord +N/-S (usft)	dinates +E/-W (usft)	Comment	*			
	10,407.5 11,157.5 15,430.4	10,407.5 10,885.0 10,885.0	0.0 -477.5 -4,750.3	0.0 2.5 24.5		DLS 12.00 TF0 4272.9 hold at .4			

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Yates Petroleum Corporation

LEASE NO.: | NMNM-110836

WELL NAME & NO.: | Fearless BSF Federal Com 2H

SURFACE HOLE FOOTAGE: 0200' FNL & 0440' FEL BOTTOM HOLE FOOTAGE 0330' FSL & 0440' FEL

LOCATION: Section 26, T. 25 S., R 32 E., NMPM

COUNTY: Lea County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

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

Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. **As a result, the Hydrogen Sulfide area must meet**Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If

available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

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

Wait on cement (WOC) for Potash Areas:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. 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.

Possibility of water flows in the Salado, Castile, and Delaware. Possibility of lost circulation in the Rustler, Delaware, and Bone Spring.

- 1. The 13-3/8 inch surface casing shall be set at approximately 865 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet 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 surface log readout will be used or a cement bond log shall be run

to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing, which shall be set at approximately 4700 feet, is:

Primary Cement proposed

☐ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Operator has proposed a contingency (per hole conditions) DV/ECP tool at depth of 3000 to 3500°. DV/ECP tool shall be set a minimum of 50° below previous shoe and a minimum of 200° above current shoe. Operator is to submit sundry if DV tool depth varies by more than 100° from approved depth.

- a. First stage to DV tool:
- Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
- b. Second stage above DV tool:
- ⊠ Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

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

Primary Cement proposed

Cement should tie-back at least 300 feet into previous casing string. Operator shall provide method of verification.

Operator has proposed contingency (per hole conditions) DV/ECP tool at depth of 9500' - 10,000'. DV/ECP tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

- a. First stage to DV tool:
- □ Cement to circulate. If cement does not circulate, contact the appropriate
 □ BLM office before proceeding with second stage cement job. Operator should
 □ have plans as to how they will achieve approved top of cement on the next
 □ stage.
- b. Second stage above DV tool:
- Cement should tie-back at least 300 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not** a **cup** or **J-packer**. 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) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

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

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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