

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM110835
2. Name of Operator YATES PETROLEUM CORPORATION		6. If Indian, Allottee or Tribe Name
3a. Address 105 SOUTH FOURTH STREET ARTESIA, NM 88210		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 575-748-4211		8. Well Name and No. RESOLUTE BTO FEDERAL COM 1H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 12 T25S R32E NENE 50FNL 440FEL 32.090808 N Lat, 103.371669 W Lon		9. API Well No. 30-025-42214-00-X1
		10. Field and Pool, or Exploratory WC-025 G08 S253235G
		11. County or Parish, and State LEA COUNTY, NM

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

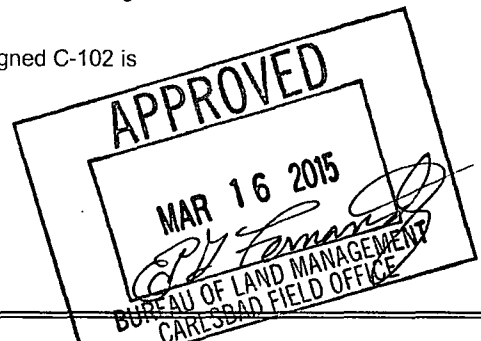
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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

Yates Petroleum Corporation respectfully requests to make the following change to the the following changes as per the attached and below:

It is requested to move our BHL to 330' FSL and 440' FEL, 12-25S-32E, Unit P. The signed C-102 is attached along with the directional plan.

Thank you.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #294990 verified by the BLM Well Information System For YATES PETROLEUM CORPORATION, sent to the Hobbs Committed to AFMSS for processing by ED FERNANDEZ on 03/16/2015 (15EF0032SE)	
Name (Printed/Typed) NAOMI G SAIZ	Title WELL PLANNING TECH
Signature (Electronic Submission)	Date 03/13/2015

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By EDWARD FERNANDEZ	Title PETROLEUM ENGINEER	Date 03/16/2015
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*****SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

MAR 31 2015

## DISTRICT I

1825 N. French Dr., Hobbs, NM 88240  
Phone (505) 393-6181 Fax: (505) 393-0780

## DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210  
Phone (505) 746-1203 Fax: (505) 740-9720

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone (505) 334-6170 Fax: (505) 334-6170

## DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 470-3460 Fax: (505) 470-3462State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102

Revised August 1, 2011

Submit one copy to appropriate  
District Office

## OIL CONSERVATION DIVISION

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-42214	Pool Code 97903	Pool Name WC-025 G08S253235G; Lower Bone Spring
Property Code 313766	Property Name RESOLUTE BTO FEDERAL	Well Number 1H
GRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3522'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	12	25 S	32 E		50	NORTH	440	EAST	LEA

## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	25 S	32 E		330	SOUTH	440	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

N 419836.258 E 756828.346  N 417199.506 E 756840.206  N 414557.823 E 756859.873	N419866.462 E 759467.329  Penetration Point: 527' FNL & 427' FEL  Project Area: →  Producing Zone: →	<b>SURFACE LOCATION</b> Lat - N 32°09'08.08" Long - W 103°37'16.69" NMSPCE- N 419845.943 E 761698.039 (NAD-83)	440' 3523.8' 3521.5' N 41990.809 E 762137.649 440'	<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>Travis Hahn</u> Date: <u>3/2/15</u> Printed Name: <u>Travis Hahn</u> Email Address: <u>thahn@yatespetroleum.com</u>
	<b>PROPOSED BOTTOM HOLE LOCATION</b> Lat - N 32°08'19.54" Long - W 103°37'16.71" NMSPCE- N 414945.5 E 761726.2 (NAD-83)	440' N 414620.674 E 762168.090	<b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. Date Surveyed: <u>APR 14 2015</u> Signature & Seal of Professional Surveyor: <u>[Signature]</u> Certificate No. <u>Gary L. Jones 7977</u> BASIN SURVEYS 28513	

## **Resolute BTO Federal #1H**

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

### **Contingency Intermediate Cement Design:**

**We would like to request that the cement design approved in APD be our primary cement design and what follows will be 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/455sx 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'

### **Pilot Hole:**

We request to drill our pilot hole to a depth of 12,400' to evaluate the top of the Wolfcamp formation. The pilot hole will be drilled with an 8 ¾" bit to TD. Well will then be plugged back with a 600' isolation plug on bottom from approx. 12,400'-11,800'. We will place a 600' kick off plug from approx. 10,800'-10,200'.

### **Production:**

Well will be kicked off at approx. 10,523' and directionally drilled at 12 degrees per 100' with an 8 ¾" bit to approx. 11,276' MD (11,000' TVD). Lateral will then be drilled with an 8 ½" bit to approx. 15,696' MD (10,970' TVD). Casing weight and grade will remain the same.

### **Production Cement:**

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

Lead w/ 610sx LiteCrete (YLD 2.85, WT 9.5, 8.9 gal/sk)

Tail w/1450sx PVL (YLD 1.36, WT 13.5, 6.3 gal/sk)

TOC approx. 4400'. 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/1450sx PVL(YLD 1.36, WT 13.5, 6.3 gal/sk)

Stage II: Lead w/735sx 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'

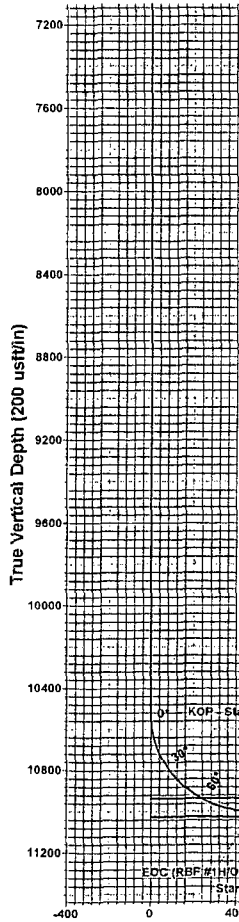


Yates Petroleum Corp.  
Project: Lea County, NM (NAD83)  
Site: Resolute BTO Federal  
Well: #1H  
Wellbore: OH  
Plan: Plan #2

#### WELL DETAILS: #1H

Ground Elevation:: 3522.0  
RKB Elevation: KB @ 3547.0usft (Nomac 22)  
Rig Name: Nomac 22

Northing 419845.94 Easting 761698.04 Latitude 32° 9' 8.034 N Longitude 103° 37' 16.660 W

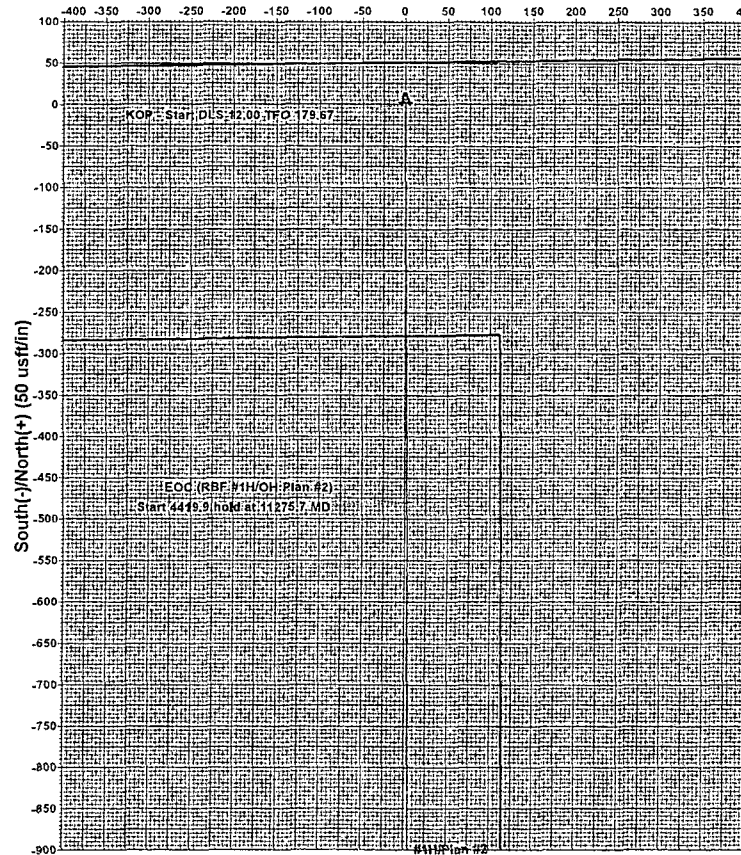


Azimuths to Grid North  
True North: -0.38°  
Magnetic North: 6.77°  
Magnetic Field  
Strength: 48195.7nT  
Dip Angle: 60.02°  
Date: 3/2/2015  
Model: IGRF2010

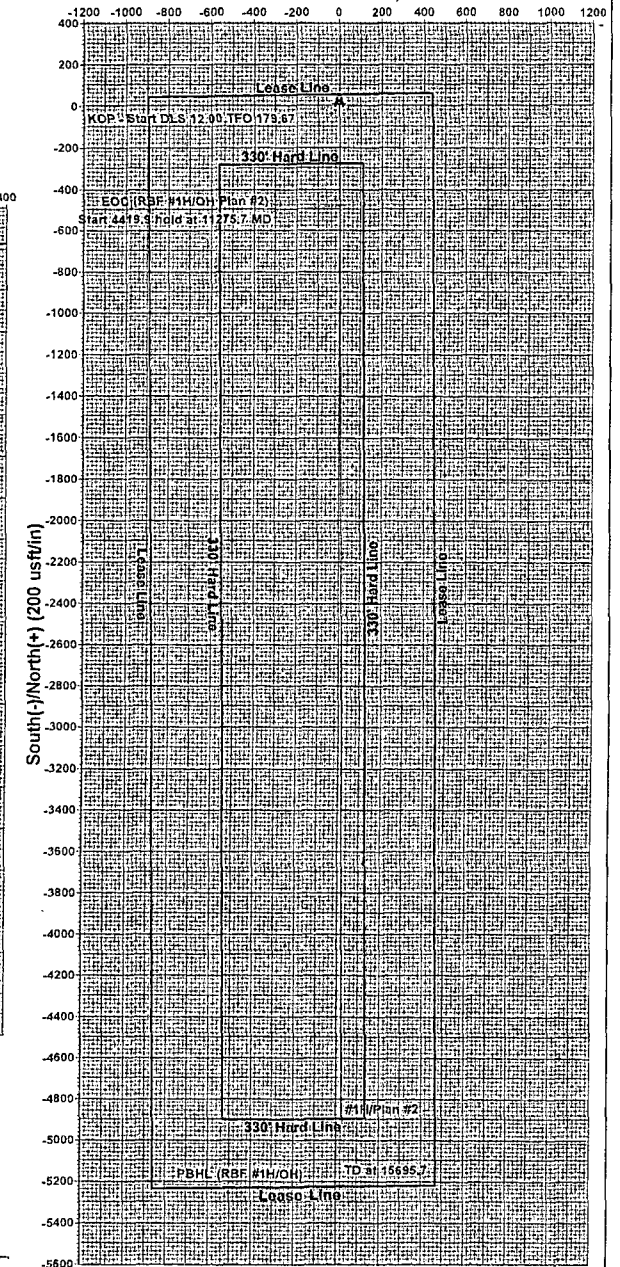
#### Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	10522.5	0.00	0.00	10522.5	0.0	0.0	0.00	0.00	0.0	
3	11275.7	90.39	179.67	11000.0	-480.7	2.8	12.00	179.67	480.7	
4	15695.7	90.39	179.67	10970.0	-4900.4	28.2	0.00	0.00	4900.5	PBHL (RBF #1H/OH)

#### West(-)/East(+) (50 usft/in)



#### West(-)/East(+) (200 usft/in)



#### Vertical Section at 179.67° (200 usft/in)



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

PROJECT DETAILS: Lea County, NM (NAD83)  
Geodetic System: US State Plane 1983  
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)

Resolute BTO Federal

#1H

OH

Plan: Plan #2

## **Standard Planning Report**

04 March, 2015





# TDS Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
Company:	Yates Petroleum Corp.	TVD Reference:	KB @ 3547.0usft (Nomac 22)
Project:	Lea County, NM (NAD83)	MD Reference:	KB @ 3547.0usft (Nomac 22)
Site:	Resolute BTO Federal	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Project:	Lea County, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Resolute BTO Federal			
Site Position:		Northing:	419,845.94 usft	Latitude:	32° 9' 8.034 N
From:	Map	Easting:	761,698.04 usft	Longitude:	103° 37' 16.660 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.38 °

Well	#1H					
Well Position	+N/-S	0.0 usft	Northing:	419,845.94 usft	Latitude:	32° 9' 8.034 N
	+E/-W	0.0 usft	Easting:	761,698.04 usft	Longitude:	103° 37' 16.660 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,522.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/2/2015	7.15	60.02	48,196

Design:	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.67

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
10,522.5	0.00	0.00	10,522.5	0.0	0.0	0.00	0.00	0.00	0.00	
11,275.7	90.39	179.67	11,000.0	-480.7	2.8	12.00	12.00	23.85	179.67	
15,695.7	90.39	179.67	10,970.0	-4,900.4	28.2	0.00	0.00	0.00	0.00	PBHL (RBF #1H/OH)



TDS  
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
Company:	Yates Petroleum Corp.	TVD Reference:	KB @ 3547.0usft (Nomac 22)
Project:	Lea County, NM (NAD83)	MD Reference:	KB @ 3547.0usft (Nomac 22)
Site:	Resolute BTO Federal	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00	



TDS  
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
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Project:	Lea County, NM (NAD83)	MD Reference:	KB @ 3547.0usft (Nomac 22)
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Wellbore:	OH		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	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	
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	0.00	
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	0.00	0.00	0.00	
9,400.0	0.00	0.00	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	0.00	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	0.00	0.00	0.00	
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
10,400.0	0.00	0.00	10,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
10,500.0	0.00	0.00	10,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
10,522.5	0.00	0.00	10,522.5	0.0	0.0	0.0	0.00	0.00	0.00	



TDS  
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
Company:	Yates Petroleum Corp.	TVD Reference:	KB @ 3547.0usft (Nomac 22)
Project:	Lea County, NM (NAD83)	MD Reference:	KB @ 3547.0usft (Nomac 22)
Site:	Resolute BTO Federal	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
KOP - Start DLS 12.00 TFO 179.67									
10,525.0	0.30	179.67	10,525.0	0.0	0.0	0.0	12.00	12.00	0.00
10,550.0	3.30	179.67	10,550.0	-0.8	0.0	0.8	12.00	12.00	0.00
10,575.0	6.30	179.67	10,574.9	-2.9	0.0	2.9	12.00	12.00	0.00
10,600.0	9.30	179.67	10,599.7	-6.3	0.0	6.3	12.00	12.00	0.00
10,625.0	12.30	179.67	10,624.2	-11.0	0.1	11.0	12.00	12.00	0.00
10,650.0	15.30	179.67	10,648.5	-16.9	0.1	16.9	12.00	12.00	0.00
10,675.0	18.30	179.67	10,672.4	-24.1	0.1	24.1	12.00	12.00	0.00
10,700.0	21.30	179.67	10,695.9	-32.6	0.2	32.6	12.00	12.00	0.00
10,725.0	24.30	179.67	10,719.0	-42.3	0.2	42.3	12.00	12.00	0.00
10,750.0	27.30	179.67	10,741.5	-53.2	0.3	53.2	12.00	12.00	0.00
10,775.0	30.30	179.67	10,763.4	-65.2	0.4	65.2	12.00	12.00	0.00
10,800.0	33.30	179.67	10,784.6	-78.4	0.5	78.4	12.00	12.00	0.00
10,825.0	36.30	179.67	10,805.2	-92.7	0.5	92.7	12.00	12.00	0.00
10,850.0	39.30	179.67	10,824.9	-108.0	0.6	108.0	12.00	12.00	0.00
10,875.0	42.30	179.67	10,843.8	-124.3	0.7	124.3	12.00	12.00	0.00
10,900.0	45.30	179.67	10,861.9	-141.6	0.8	141.6	12.00	12.00	0.00
10,925.0	48.30	179.67	10,879.0	-159.8	0.9	159.8	12.00	12.00	0.00
10,950.0	51.30	179.67	10,895.1	-178.9	1.0	178.9	12.00	12.00	0.00
10,975.0	54.30	179.67	10,910.2	-198.8	1.1	198.8	12.00	12.00	0.00
11,000.0	57.30	179.67	10,924.3	-219.5	1.3	219.5	12.00	12.00	0.00
11,025.0	60.30	179.67	10,937.2	-240.9	1.4	240.9	12.00	12.00	0.00
11,050.0	63.30	179.67	10,949.1	-262.9	1.5	262.9	12.00	12.00	0.00
11,075.0	66.30	179.67	10,959.7	-285.5	1.6	285.5	12.00	12.00	0.00
11,100.0	69.30	179.67	10,969.1	-308.7	1.8	308.7	12.00	12.00	0.00
11,125.0	72.30	179.67	10,977.4	-332.3	1.9	332.3	12.00	12.00	0.00
11,150.0	75.30	179.67	10,984.3	-356.3	2.0	356.3	12.00	12.00	0.00
11,175.0	78.30	179.67	10,990.0	-380.6	2.2	380.6	12.00	12.00	0.00
11,200.0	81.30	179.67	10,994.5	-405.2	2.3	405.2	12.00	12.00	0.00
11,225.0	84.30	179.67	10,997.6	-430.0	2.5	430.0	12.00	12.00	0.00
11,250.0	87.30	179.67	10,999.4	-455.0	2.6	455.0	12.00	12.00	0.00
11,275.7	90.39	179.67	11,000.0	-480.7	2.8	480.7	12.00	12.00	0.00
EOC - Start 4419.9 hold at 11275.7 MD									
11,300.0	90.39	179.67	10,999.8	-505.0	2.9	505.0	0.00	0.00	0.00
11,400.0	90.39	179.67	10,999.1	-605.0	3.5	605.0	0.00	0.00	0.00
11,500.0	90.39	179.67	10,998.4	-704.9	4.1	705.0	0.00	0.00	0.00
11,600.0	90.39	179.67	10,997.8	-804.9	4.6	805.0	0.00	0.00	0.00
11,700.0	90.39	179.67	10,997.1	-904.9	5.2	905.0	0.00	0.00	0.00
11,800.0	90.39	179.67	10,996.4	-1,004.9	5.8	1,005.0	0.00	0.00	0.00
11,900.0	90.39	179.67	10,995.7	-1,104.9	6.3	1,105.0	0.00	0.00	0.00
12,000.0	90.39	179.67	10,995.0	-1,204.9	6.9	1,204.9	0.00	0.00	0.00
12,100.0	90.39	179.67	10,994.4	-1,304.9	7.5	1,304.9	0.00	0.00	0.00
12,200.0	90.39	179.67	10,993.7	-1,404.9	8.1	1,404.9	0.00	0.00	0.00
12,300.0	90.39	179.67	10,993.0	-1,504.9	8.6	1,504.9	0.00	0.00	0.00
12,400.0	90.39	179.67	10,992.3	-1,604.9	9.2	1,604.9	0.00	0.00	0.00
12,500.0	90.39	179.67	10,991.7	-1,704.9	9.8	1,704.9	0.00	0.00	0.00
12,600.0	90.39	179.67	10,991.0	-1,804.9	10.4	1,804.9	0.00	0.00	0.00
12,700.0	90.39	179.67	10,990.3	-1,904.9	10.9	1,904.9	0.00	0.00	0.00
12,800.0	90.39	179.67	10,989.6	-2,004.9	11.5	2,004.9	0.00	0.00	0.00
12,900.0	90.39	179.67	10,988.9	-2,104.9	12.1	2,104.9	0.00	0.00	0.00
13,000.0	90.39	179.67	10,988.3	-2,204.9	12.7	2,204.9	0.00	0.00	0.00
13,100.0	90.39	179.67	10,987.6	-2,304.9	13.2	2,304.9	0.00	0.00	0.00
13,200.0	90.39	179.67	10,986.9	-2,404.9	13.8	2,404.9	0.00	0.00	0.00
13,300.0	90.39	179.67	10,986.2	-2,504.9	14.4	2,504.9	0.00	0.00	0.00



TDS  
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #1H
Company:	Yates Petroleum Corp.	TVD Reference:	KB @ 3547.0usft (Nomac 22)
Project:	Lea County, NM (NAD83)	MD Reference:	KB @ 3547.0usft (Nomac 22)
Site:	Resolute BTO Federal	North Reference:	Grid
Well:	#1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,400.0	90.39	179.67	10,985.6	-2,604.9	15.0	2,604.9	0.00	0.00	0.00
13,500.0	90.39	179.67	10,984.9	-2,704.9	15.5	2,704.9	0.00	0.00	0.00
13,600.0	90.39	179.67	10,984.2	-2,804.9	16.1	2,804.9	0.00	0.00	0.00
13,700.0	90.39	179.67	10,983.5	-2,904.9	16.7	2,904.9	0.00	0.00	0.00
13,800.0	90.39	179.67	10,982.8	-3,004.9	17.3	3,004.9	0.00	0.00	0.00
13,900.0	90.39	179.67	10,982.2	-3,104.9	17.8	3,104.9	0.00	0.00	0.00
14,000.0	90.39	179.67	10,981.5	-3,204.8	18.4	3,204.9	0.00	0.00	0.00
14,100.0	90.39	179.67	10,980.8	-3,304.8	19.0	3,304.9	0.00	0.00	0.00
14,200.0	90.39	179.67	10,980.1	-3,404.8	19.6	3,404.9	0.00	0.00	0.00
14,300.0	90.39	179.67	10,979.5	-3,504.8	20.1	3,504.9	0.00	0.00	0.00
14,400.0	90.39	179.67	10,978.8	-3,604.8	20.7	3,604.9	0.00	0.00	0.00
14,500.0	90.39	179.67	10,978.1	-3,704.8	21.3	3,704.9	0.00	0.00	0.00
14,600.0	90.39	179.67	10,977.4	-3,804.8	21.9	3,804.9	0.00	0.00	0.00
14,700.0	90.39	179.67	10,976.7	-3,904.8	22.4	3,904.9	0.00	0.00	0.00
14,800.0	90.39	179.67	10,976.1	-4,004.8	23.0	4,004.9	0.00	0.00	0.00
14,900.0	90.39	179.67	10,975.4	-4,104.8	23.6	4,104.9	0.00	0.00	0.00
15,000.0	90.39	179.67	10,974.7	-4,204.8	24.2	4,204.9	0.00	0.00	0.00
15,100.0	90.39	179.67	10,974.0	-4,304.8	24.7	4,304.9	0.00	0.00	0.00
15,200.0	90.39	179.67	10,973.4	-4,404.8	25.3	4,404.9	0.00	0.00	0.00
15,300.0	90.39	179.67	10,972.7	-4,504.8	25.9	4,504.9	0.00	0.00	0.00
15,400.0	90.39	179.67	10,972.0	-4,604.8	26.5	4,604.9	0.00	0.00	0.00
15,500.0	90.39	179.67	10,971.3	-4,704.8	27.0	4,704.9	0.00	0.00	0.00
15,600.0	90.39	179.67	10,970.6	-4,804.8	27.6	4,804.9	0.00	0.00	0.00
15,695.7	90.39	179.67	10,970.0	-4,900.4	28.2	4,900.5	0.00	0.00	0.00
TD at 15695.7									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL (RBF #1H/OH)	0.00	0.00	10,970.0	-4,900.4	28.2	414,945.50	761,726.20	32° 8' 19.540 N	103° 37' 16.710 W
- plan hits target center									
- Point									
EOC (RBF #1H/OH Plan)	0.00	0.00	11,000.0	-480.7	2.8	419,365.29	761,700.80	32° 9' 3.278 N	103° 37' 16.665 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
10,522.5	10,522.5	0.0	0.0	KOP - Start DLS 12.00 TFO 179.67
11,275.7	11,000.0	-480.7	2.8	EOC - Start 4419.9 hold at 11275.7 MD
15,695.7	10,970.0	-4,900.4	28.2	TD at 15695.7

## CONDITIONS OF APPROVAL

Sundry dated 03/13/2015

OPERATOR'S NAME:	YATES PETROLEUM
LEASE NO.:	NM110835
WELL NAME & NO.:	1H-RESOLUTE BTO FEDERAL COM
SURFACE HOLE FOOTAGE:	50' FNL & 440' FEL
BOTTOM HOLE FOOTAGE:	330' FSL & 330' FEL
LOCATION:	Section 12, 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. **Although there are no measured amounts of Hydrogen Sulfide reported, it is always a potential hazard. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The 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 and brine flows in the Salado, Castile Delaware, and Bone Springs Formations.

Possibility of lost circulation in the Triassic Red Beds, Dewey Lake, Delaware, and Bone Springs Formations.

A CIT is to be performed on the casing per Onshore Oil and Gas Order 2.III.B.1.h prior to drilling the shoe plug. Pressure not to exceed 70% of the burst rating of the casing.

1. The 13-3/8 inch surface casing shall be set at approximately 1100 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 is:

**Primary Intermediate Cement Job:**

- ☒ 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.**

**Contingency Intermediate Cement Job:**

**Operator has proposed DV tool at depth of 3,000' to 3,500', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.**

- 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 of cement to surface 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.

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

**The pilot hole plugging procedure is approved as written.**

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

**Primary Production Cement Job:**

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

**Contingency Production Cement Job:**

**Operator has proposed DV tools at depths of 9,500' to 10,000', but will adjust cement proportionately if moved. DV tools shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.**

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 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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