Form 3160-5
(August 2007)

OCD Artesia

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

5. Lease Serial No.
NMNM27276

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
BENSON DEEP AAS FEDERAL COM 2H

2. Name of Operator
YATES PEETROLEUM CORPORATION

Contact: NAOMI G SAIZ
E-Mail: NSAIZ@YATESPETROLEUM.COM

9. API Well No.
30-015-41247

3a. Address
105 S. 4TH ST. ARTESIA
NEW MEXICO, NM 88210

3b. Phone No. (include area code)
Ph: 575-748-4211

10. Field and Pool, or Exploratory
BONE SPRINGS 2/SD/

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 33 T18S R30E NWNW 660FNL 300FWL

11. County or Parish, and State
EDDY COUNTY COUNTY, NM

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

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

13. Describe Proposed or Completed Operation (clearly state all pertinent details, 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 change our bottom hole location to 939' FNL and 330'E, Section 33, 18S-30E. The new plat, directional WM and survey are attached. We would also like to request to remove the packers and ports system and make the casing and cement changes as per attached.

Accepted for record
NMOCD 1-6-2014

RECEIVED
JAN 06 2014
NMOCD ARTESIA

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #227203 verified by the BLM Well Information System
For YATES PEETROLEUM CORPORATION, sent to the Carlsbad
Committed to AFMSS for processing by JOHNNY DICKERSON on 11/21/2013 ()

Name *(Printed/Typed)* NAOMI G SAIZ — Title WELL PLANNING TECH

Signature (Electronic Submission) — Date 11/18/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
JAN 2 2014
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Approved By _____ Title _____ Date _____

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

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised July 16, 2010

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	37920	Leo; Bone Spring, South

Property Code	Property Name	Well Number
	BENSON DEEP "AAS" FEDERAL COM	2H

OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORP.	3425'

Surface Location

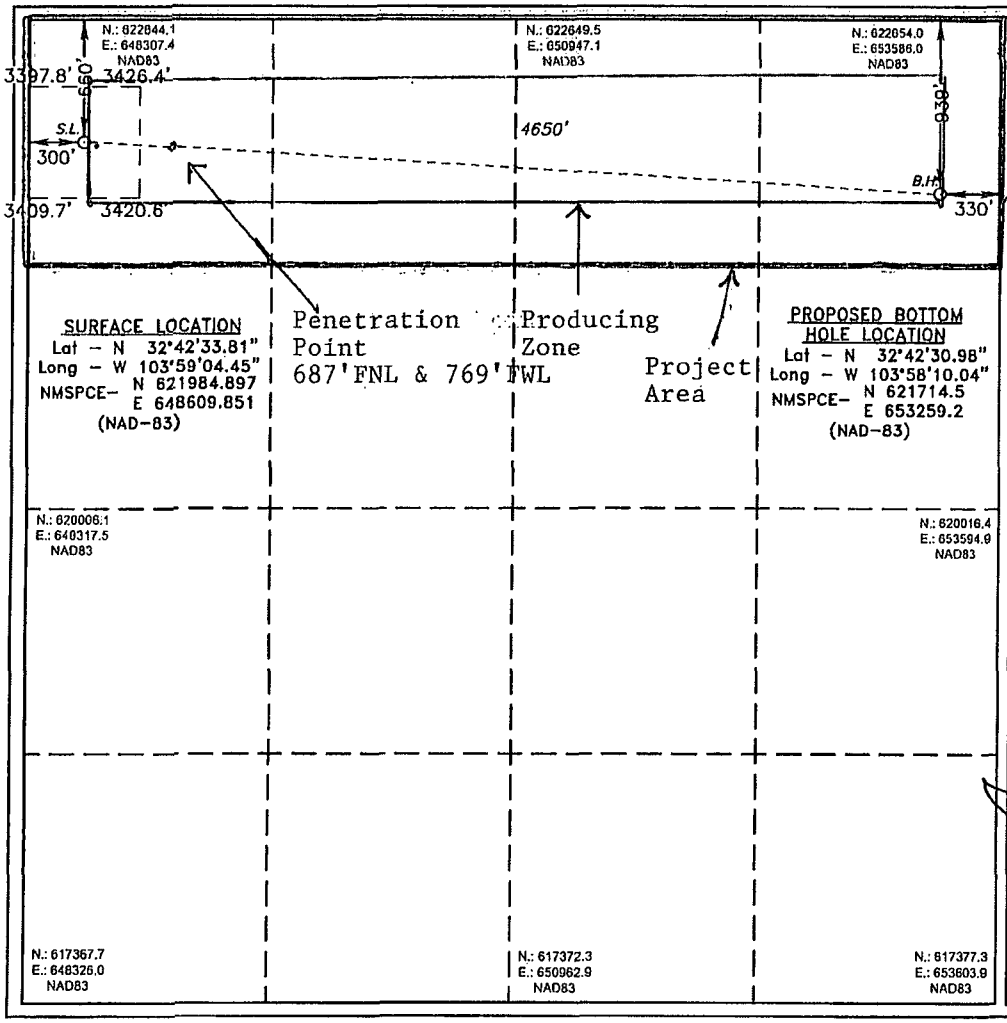
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	33	18 S	30 E		660	NORTH	300	WEST	EDDY

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
A	33	18 S	30 E		939	NORTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
180			

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location 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 Date

Travis Hahn
Printed Name

thahn@yatespetroleum.com
Email Address

SURVEYOR CERTIFICATION

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

DECEMBER 06, 2011
Date Surveyed

Signature & Seal of Professional Surveyor

NEW MEXICO 7977 PROFESSIONAL SURVEYOR

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 25756

Well will be drilled to 7819'. Well will then be kicked off at approx. 7819' and directionally drilled at 12 degrees per 100' with an 8 ¾" hole to 8561' MD (8296' TVD). Hole will then be reduced to 8 ½" and drilled to 12748' MD (8343' TVD) where 5 ½" casing will be set and cemented 500' into previous casing string with a DV/Packer stage tool at approx. 5500'. Penetration point of the producing zone will be encountered at 687' FNL & 769' FWL, Section 33, 18S-30E. Deepest TVD is 8343' in the lateral

Production Casing Design:

	0 ft to 12,748 ft			Make up Torque ft-lbs		Total ft = 12,748
O.D.	Weight	Grade	Threads	opt.	min.	mx.
5.5 inches	17 #/ft	P-110	BT&C			
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift
7,480 psi	10,640 psi	568,000 #		546 ,000 #		4.767

DV/Packer Stage tool placed approximately at ~~5500'~~ 6500
Stage I: Lead w/340sx 35/65 PozC (YLD 2 WT 12.5, 11 gal/sk), tail w/910sx PVL (YLD 1.82 WT 13, 9.3 gal/sk) 12,748-5500' 35% Excess
Stage II: Lead w/290 35/65 PozC (YLD 2 WT 12.5, 11 gal/sk) tail w/205sx C (YLD 1.34 WT 14.8, 6.2 gal/sk) 5500'-0' 35% Excess

Lead 1050sx 1.82 ft^3/sx

Tail 340sx 2 ft^3/sx
335sx 1.34 ft^3/sx

ATES PETROLEUM CORPORATION

Scientific Drilling

G T M

To convert Magnetic North to Grid, Add 7.32°
To convert True North to Grid, Subtract 0.19°

Azimuths to Grid North
True North: -0.19°
Magnetic North: 7.33°

Magnetic Field
Strength: 48669.2snT
Dip Angle: 60.54°
Date: 11/5/2013
Model: IGRF200510

Benson Deep AAS Federal Com #2H
Eddy County, NM (NAD83 NME)
Northing: (Y) 621984.897
Easting: (X) 648609.851
Plan #3

KB = 18.5 @ 3443.50usft (McVay 8)
Ground Level:3425.00

WELL DETAILS:

Ground Level: 3425.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	621984.897	648609.851	32° 42' 33.814 N	103° 59' 4.449 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7818.60	0.00	0.00	7818.60	0.00	0.00	0.00	0.00	0.00	
8560.50	89.03	93.33	8296.00	-27.24	468.57	12.00	93.33	469.36	
9091.21	89.03	93.33	8305.00	-58.05	998.31	0.00	0.00	1000.00	#2H TGT #1 P3
9591.29	88.91	93.33	8314.00	-87.07	1497.47	0.02	180.00	1500.00	#2H TGT #2 P3
9600.05	89.08	93.33	8314.15	-87.58	1506.21	2.00	0.00	1508.76	
10091.36	89.08	93.33	8322.00	-116.09	1996.63	0.00	0.00	2000.00	#2H TGT #3 P3
10097.04	89.20	93.33	8322.09	-116.42	2002.30	2.00	-0.01	2005.68	
10591.40	89.20	93.33	8329.00	-145.12	2495.78	0.00	0.00	2500.00	#2H TGT #4 P3
10602.96	89.43	93.33	8329.14	-145.79	2507.32	2.00	0.00	2511.56	
11091.43	89.43	93.33	8334.00	-174.14	2994.94	0.00	0.00	3000.00	#2H TGT #5 P3
11108.79	89.78	93.33	8334.12	-175.15	3012.27	2.00	0.00	3017.35	
11591.43	89.78	93.33	8336.00	-203.16	3494.10	0.00	0.00	3500.00	#2H TGT #6 P3
11597.50	89.66	93.33	8336.03	-203.51	3500.16	2.00	-180.00	3506.07	
12091.44	89.66	93.33	8339.00	-232.18	3993.26	0.00	0.00	4000.00	#2H TGT #7 P3
12591.45	89.66	93.33	8342.00	-261.21	4492.41	0.00	0.00	4500.00	#2H TGT #8 P3
12748.62	89.62	93.33	8343.00	-270.33	4649.32	0.03	-179.96	4657.17	PBHL (#2H) P3

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
#2H TGT #1 P3	8305.00	-58.05	998.31	621926.851	649608.165
#2H TGT #2 P3	8314.00	-87.07	1497.47	621897.828	650107.322
#2H TGT #3 P3	8322.00	-116.09	1996.63	621868.805	650606.478
#2H TGT #4 P3	8329.00	-145.12	2495.78	621839.782	651105.635
#2H TGT #5 P3	8334.00	-174.14	2994.94	621810.759	651604.792
#2H TGT #6 P3	8336.00	-203.16	3494.10	621781.736	652103.950
#2H TGT #7 P3	8339.00	-232.18	3993.26	621752.713	652603.107
#2H TGT #8 P3	8342.00	-261.21	4492.41	621723.690	653102.264
PBHL (#2H) P3	8343.00	-270.33	4649.32	621714.567	653259.168

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone

Local Origin: Site Benson Deep AAS Federal Com, Grid North

Latitude: 32° 42' 33.814 N
Longitude: 103° 59' 4.449 W

Grid East: 648609.851
Grid North: 621984.897
Scale Factor: 1.000

Geomagnetic Model: IGRF200510
Sample Date: 05-Nov-13
Magnetic Declination: 7.51°
Dip Angle from Horizontal: 60.54°
Magnetic Field Strength: 48669

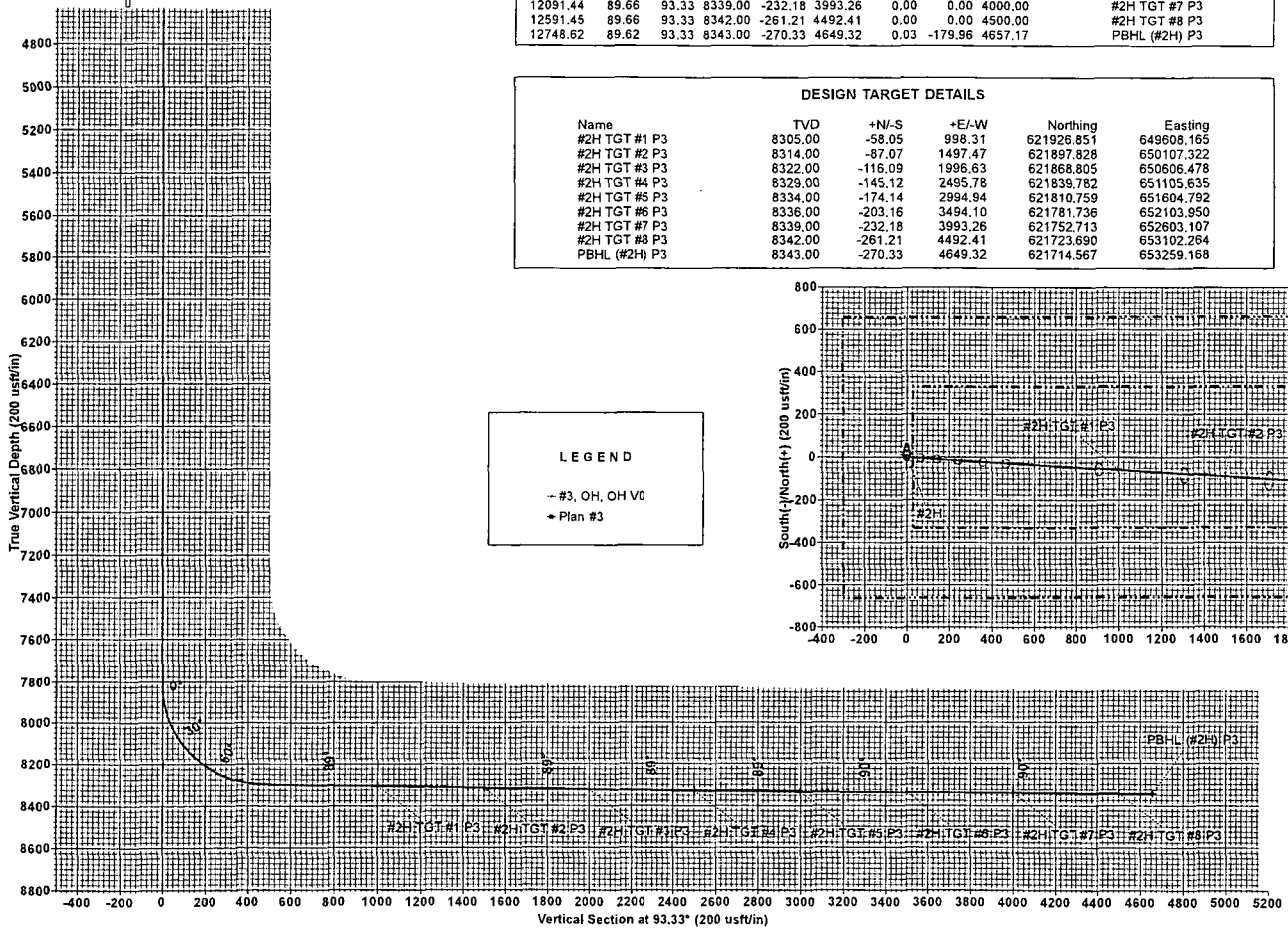
To convert Magnetic North to Grid, Add 7.32°
To convert Magnetic North to True, Add 7.51° East
To convert True North to Grid, Subtract 0.19°

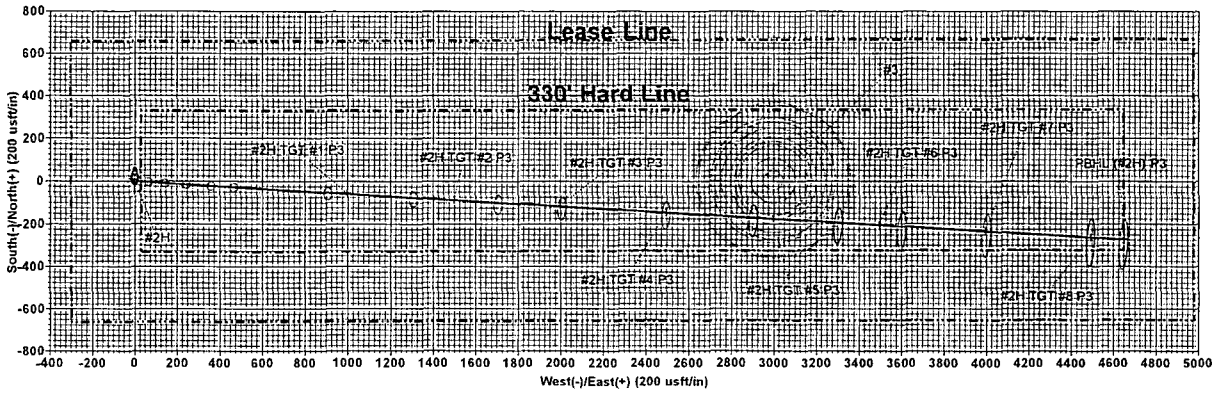
PROJECT DETAILS: Eddy County, NM (NAD83 NME)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

LEGEND

#3, OH, OH V0
Plan #3





Sam Biffle
11:07, November 14 2013
Scientific Drilling
2034 Trade Drive
Midland, TX 79703

Yates Petroleum Corp.

Eddy County, NM (NAD83 NME)
Benson Deep AAS Federal Com
#2H

Oh

Plan: Plan #3

Standard Planning Report

14 November, 2013

Database:	Midland District	Local Co-ordinate Reference:	Site Benson Deep AAS Federal Com
Company:	Yates Petroleum Corp	TVD Reference:	KB = 18.5 @ 3443.50usft (McVay 8)
Project:	Eddy County, NM (NAD83 NME)	MD Reference:	KB = 18.5 @ 3443.50usft (McVay 8)
Site:	Benson Deep AAS Federal Com	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Oh		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00	0.00
Conductor									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
289.00	0.00	0.00	289.00	0.00	0.00	0.00	0.00	0.00	0.00
RUSTLER									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
559.00	0.00	0.00	559.00	0.00	0.00	0.00	0.00	0.00	0.00
TOP OF SALT									
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,389.00	0.00	0.00	1,389.00	0.00	0.00	0.00	0.00	0.00	0.00
BASE OF SALT									
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,524.00	0.00	0.00	1,524.00	0.00	0.00	0.00	0.00	0.00	0.00
TANSILL									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,659.00	0.00	0.00	1,659.00	0.00	0.00	0.00	0.00	0.00	0.00
YATES									
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,989.00	0.00	0.00	1,989.00	0.00	0.00	0.00	0.00	0.00	0.00
SEVEN RIVERS									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,769.00	0.00	0.00	2,769.00	0.00	0.00	0.00	0.00	0.00	0.00
QUEEN									
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,369.00	0.00	0.00	3,369.00	0.00	0.00	0.00	0.00	0.00	0.00
GRAYBURG									

Database:	Midland District	**Local Co-ordinate Reference:**	Site Benson Deep AAS Federal Com
Company:	Yates Petroleum Corp	**TVD Reference:**	KB = 18.5 @ 3443.50usft (McVay 8)
Project:	Eddy County, NM (NAD83/NME)	**MD Reference:**	KB = 18.5 @ 3443.50usft (McVay 8)
Site:	Benson Deep AAS Federal Com	**North Reference:**	Grid
Well:	#2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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)
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,818.60	0.00	0.00	7,818.60	0.00	0.00	0.00	0.00	0.00	0.00
7,825.00	0.77	93.33	7,825.00	0.00	0.04	0.04	12.00	12.00	0.00
7,850.00	3.77	93.33	7,849.98	-0.06	1.03	1.03	12.00	12.00	0.00
7,875.00	6.77	93.33	7,874.87	-0.19	3.32	3.33	12.00	12.00	0.00
7,900.00	9.77	93.33	7,899.61	-0.40	6.91	6.92	12.00	12.00	0.00
7,925.00	12.77	93.33	7,924.12	-0.69	11.79	11.81	12.00	12.00	0.00
7,950.00	15.77	93.33	7,948.35	-1.04	17.94	17.97	12.00	12.00	0.00
7,975.00	18.77	93.33	7,972.22	-1.47	25.34	25.39	12.00	12.00	0.00
8,000.00	21.77	93.33	7,995.67	-1.98	33.99	34.05	12.00	12.00	0.00
8,025.00	24.77	93.33	8,018.63	-2.55	43.85	43.92	12.00	12.00	0.00
8,050.00	27.77	93.33	8,041.05	-3.19	54.89	54.98	12.00	12.00	0.00
8,075.00	30.77	93.33	8,062.85	-3.90	67.09	67.21	12.00	12.00	0.00
8,100.00	33.77	93.33	8,083.99	-4.68	80.41	80.55	12.00	12.00	0.00
8,125.00	36.77	93.33	8,104.40	-5.51	94.82	94.98	12.00	12.00	0.00
8,150.00	39.77	93.33	8,124.03	-6.41	110.28	110.47	12.00	12.00	0.00
8,175.00	42.77	93.33	8,142.81	-7.37	126.74	126.95	12.00	12.00	0.00
8,200.00	45.77	93.33	8,160.71	-8.38	144.16	144.40	12.00	12.00	0.00
8,225.00	48.77	93.33	8,177.68	-9.45	162.49	162.76	12.00	12.00	0.00
8,231.61	49.56	93.33	8,182.00	-9.74	167.48	167.77	12.00	12.00	0.00
BONE SPRINGS 2/SD/									
8,250.00	51.77	93.33	8,193.65	-10.56	181.68	181.99	12.00	12.00	0.00
8,275.00	54.77	93.33	8,208.60	-11.73	201.68	202.02	12.00	12.00	0.00
8,300.00	57.77	93.33	8,222.49	-12.93	222.43	222.81	12.00	12.00	0.00
8,325.00	60.77	93.33	8,235.26	-14.18	243.88	244.30	12.00	12.00	0.00
8,350.00	63.77	93.33	8,246.89	-15.46	265.97	266.42	12.00	12.00	0.00
8,375.00	66.77	93.33	8,257.35	-16.78	288.64	289.13	12.00	12.00	0.00
8,400.00	69.77	93.33	8,266.61	-18.13	311.82	312.35	12.00	12.00	0.00
8,425.00	72.77	93.33	8,274.63	-19.50	335.45	336.02	12.00	12.00	0.00
8,450.00	75.77	93.33	8,281.41	-20.90	359.47	360.08	12.00	12.00	0.00
8,475.00	78.77	93.33	8,286.92	-22.32	383.81	384.46	12.00	12.00	0.00
8,500.00	81.77	93.33	8,291.15	-23.75	408.41	409.10	12.00	12.00	0.00
8,525.00	84.77	93.33	8,294.08	-25.19	433.19	433.93	12.00	12.00	0.00
8,550.00	87.77	93.33	8,295.70	-26.64	458.10	458.87	12.00	12.00	0.00
8,560.50	89.03	93.33	8,296.00	-27.24	468.57	469.36	12.00	12.00	0.00
8,600.00	89.03	93.33	8,296.67	-29.54	508.00	508.86	0.00	0.00	0.00
8,700.00	89.03	93.33	8,298.36	-35.34	607.82	608.85	0.00	0.00	0.00
8,800.00	89.03	93.33	8,300.06	-41.14	707.64	708.83	0.00	0.00	0.00
8,900.00	89.03	93.33	8,301.76	-46.95	807.45	808.82	0.00	0.00	0.00
9,000.00	89.03	93.33	8,303.45	-52.75	907.27	908.80	0.00	0.00	0.00
9,091.21	89.03	93.33	8,305.00	-58.05	998.31	1,000.00	0.00	0.00	0.00
9,100.00	89.03	93.33	8,305.15	-58.56	1,007.09	1,008.79	0.02	-0.02	0.00
9,200.00	89.00	93.33	8,306.87	-64.36	1,106.90	1,108.77	0.02	-0.02	0.00
9,300.00	88.98	93.33	8,308.63	-70.16	1,206.72	1,208.76	0.02	-0.02	0.00
9,400.00	88.95	93.33	8,310.44	-75.97	1,306.53	1,308.74	0.02	-0.02	0.00
9,500.00	88.93	93.33	8,312.28	-81.77	1,406.35	1,408.72	0.02	-0.02	0.00
9,591.29	88.91	93.33	8,314.00	-87.07	1,497.47	1,500.00	0.02	-0.02	0.00
9,600.05	89.08	93.33	8,314.15	-87.58	1,506.21	1,508.76	2.00	2.00	0.00
9,700.00	89.08	93.33	8,315.75	-93.38	1,605.98	1,608.69	0.00	0.00	0.00
9,800.00	89.08	93.33	8,317.35	-99.18	1,705.80	1,708.68	0.00	0.00	0.00
9,900.00	89.08	93.33	8,318.94	-104.99	1,805.62	1,808.67	0.00	0.00	0.00
10,000.00	89.08	93.33	8,320.54	-110.79	1,905.44	1,908.66	0.00	0.00	0.00
10,091.36	89.08	93.33	8,322.00	-116.09	1,996.63	2,000.00	0.00	0.00	0.00
10,097.04	89.20	93.33	8,322.09	-116.42	2,002.30	2,005.68	2.00	2.00	0.00

Database:	Midland District	Local Co-ordinate Reference:	Site Benson Deep AAS Federal Com
Company:	Yates Petroleum Corp.	TVD Reference:	KB = 18.5' @ 3443.50usft (McVay 8)
Project:	Eddy County, NM (NAD83 NME)	MD Reference:	KB = 18.5' @ 3443.50usft (McVay 8)
Site:	Benson Deep AAS Federal Com	North Reference:	Grid
Well:	#2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
#2H TGT #1 P3 - plan hits target center - Point	0.00	0.00	8,305.00	-58.05	998.31	621,926.851	649,608.165	32° 42' 33.207 N	103° 58' 52.767 W
#2H TGT #2 P3 - plan hits target center - Point	0.00	0.00	8,314.00	-87.07	1,497.47	621,897.828	650,107.322	32° 42' 32.903 N	103° 58' 46.926 W
#2H TGT #3 P3 - plan hits target center - Point	0.00	0.00	8,322.00	-116.09	1,996.63	621,868.805	650,606.479	32° 42' 32.600 N	103° 58' 41.085 W
#2H TGT #4 P3 - plan hits target center - Point	0.00	0.00	8,329.00	-145.12	2,495.78	621,839.782	651,105.635	32° 42' 32.296 N	103° 58' 35.244 W
#2H TGT #5 P3 - plan hits target center - Point	0.00	0.00	8,334.00	-174.14	2,994.94	621,810.759	651,604.792	32° 42' 31.992 N	103° 58' 29.403 W
#2H TGT #6 P3 - plan hits target center - Point	0.00	0.00	8,336.00	-203.16	3,494.10	621,781.736	652,103.950	32° 42' 31.688 N	103° 58' 23.562 W
#2H TGT #7 P3 - plan hits target center - Point	0.00	0.00	8,339.00	-232.18	3,993.26	621,752.713	652,603.107	32° 42' 31.384 N	103° 58' 17.721 W
#2H TGT #8 P3 - plan hits target center - Point	0.00	0.00	8,342.00	-261.21	4,492.41	621,723.690	653,102.264	32° 42' 31.080 N	103° 58' 11.880 W
PBHL (#2H) P3 - plan hits target center - Point	0.00	0.00	8,343.00	-270.33	4,649.32	621,714.567	653,259.168	32° 42' 30.984 N	103° 58' 10.043 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
58.00	58.00	Conductor	20	26
400.00	400.00	Surface	8-5/8	11
3,500.00	3,500.00	Intermediate	9-5/8	12-1/4

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corp
LEASE NO.:	LC028978B
WELL NAME & NO.:	Benson Deep AAS Federal Com 2H
SURFACE HOLE FOOTAGE:	660' FNL & 300' FWL
BOTTOM HOLE FOOTAGE	660' FNL & 330' FEL
LOCATION:	Section 33, T.18 S., R.30 E., NMPM
COUNTY:	Eddy County, New Mexico

The original COAs still stand with the following drilling modifications:

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)

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

1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Queen** 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. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#).
Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

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

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

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

Secretary's Potash
Possible brine flows in the Salado and Artesia groups.
Possible lost circulation in the Artesia group.

1. The **13-3/8** inch surface casing shall be set at approximately **330** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with 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:

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

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

Operator has proposed DV tool at depth of 6500'. 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. **Excess calculates to 21% - Additional cement may be required.**

b. Second stage above DV tool:

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

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

C. PRESSURE CONTROL

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

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

    a. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

    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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