

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

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.*5. Lease Serial No.
NMNM114356

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

Multiple--See Attached *Sandy Fed 1*

2. Name of Operator

STRATA PRODUCTION COMPANY

Contact: PAUL RAGSDALE

9. API Well No.

Multiple--See Attached *30-95-2H*

3a. Address

ROSWELL, NM 88202-1030

3b. Phone No. (include area code)

Ph: 575.622.1127

10. Field and Pool, or Exploratory

FORTY NINER RIDGE;
Delaware *21126*

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Multiple--See Attached

11. County or Parish, and State

EDDY COUNTY, NM

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

TYPE OF SUBMISSION

TYPE OF ACTION

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

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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Propose to squeeze off existing perms in the Delaware formation from 5897' to 7372'. Drill out the squeeze jobs and test 7 5/8" casing to 1000#. This squeeze job would be done with a Well Servicing pulling unit and a reverse unit.

After all existing producing perms are shut off, move in a drilling rig and drill a horizontal lateral as follows:

Set a whipstock at 7404', cut a 6 1/4" window in the casing at a 2 degree angle. Pick up the directional assembly and cut a curve an land a lateral at 7673' in the Lower Brushy Canyon formation. Drill a lateral on a 90 to 93 degree angle to a Bottom Hole location of 330' FNL & 330' FWL with a lateral length of 1647'.

Run a liner consisting of 4 1/2" 11.6#/ft P-110 casing and a Weatherford liner hanger set at 7350'.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****NM OIL CONSERVATION**

ARTESIA DISTRICT

SEP 13 2016

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

Electronic Submission #343334 verified by the BLM Well Information System

For STRATA PRODUCTION COMPANY, sent to the Carlsbad

Committed to AFMSS for processing by PRISCILLA PEREZ on 07/07/2016 (16PP1627SE)

RECEIVED

Name (Printed/Typed) PAUL RAGSDALE

Title OPERATIONS MANAGER

Signature (Electronic Submission)

Date 06/28/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Walls

Title

Eng

Date

9/11/16

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

CFO

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 ****

Additional data for EC transaction #343334 that would not fit on the form

Wells/Facilities, continued

Agreement	Lease	Well/Fac Name, Number	API Number	Location
NMNM114356	NMNM114356	SANDY 1	30-015-21126-00-S1	Sec 24 T23S R30E SWNW 1979FNL 660FWL
NMNM114356	NMNM114356	SANDY 1	30-015-21126-00-S2	Sec 24 T23S R30E SWNW 1979FNL 660FWL

32. Additional remarks, continued

Cement the liner with 200 sacks of Class H 50/50 Poz Cement + 0.3% bwoc FL-52 + 0.005 lbs/sack Static Free + 1 gals/100 sack FP-6L + 46.2% Fresh Water. 14.8 density, 1.24 yield, 5.21 gal/sk H2O. Calculated with 50% excess.

Rig down drilling rig and move out. Move in a pulling unit and complete the horizontal lateral by perforating 6 to 8 stages and fracing each stage with 150,000 lbs of 20/40 sand at 30 bpm.

Clean up frac job and put well on a sub pump.

Attachments: Proposed Directional Plan, Revised C-102, Confidential Seismic showing the proposed track of lateral.

ARTESIA DISTRICT

	GEODETIC COORDINATES NAD 27 NZIE Y=470357.1 N X=832333.7 E LAT.=32°17'31.80" N LONG.=103°50'25.28" W
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OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Paul Ragsdale</i> Signature _____ Paul Ragsdale Printed Name _____ Operations Manager Title _____ Date _____	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plot 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. SEPTEMBER 14, 2005 Date Surveyed _____ Signature _____ Printed Name _____ Certified by No. 6511 _____ 13041
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Sandy Fed #1
Sec 24-T23S-R30E
Eddy County, NM

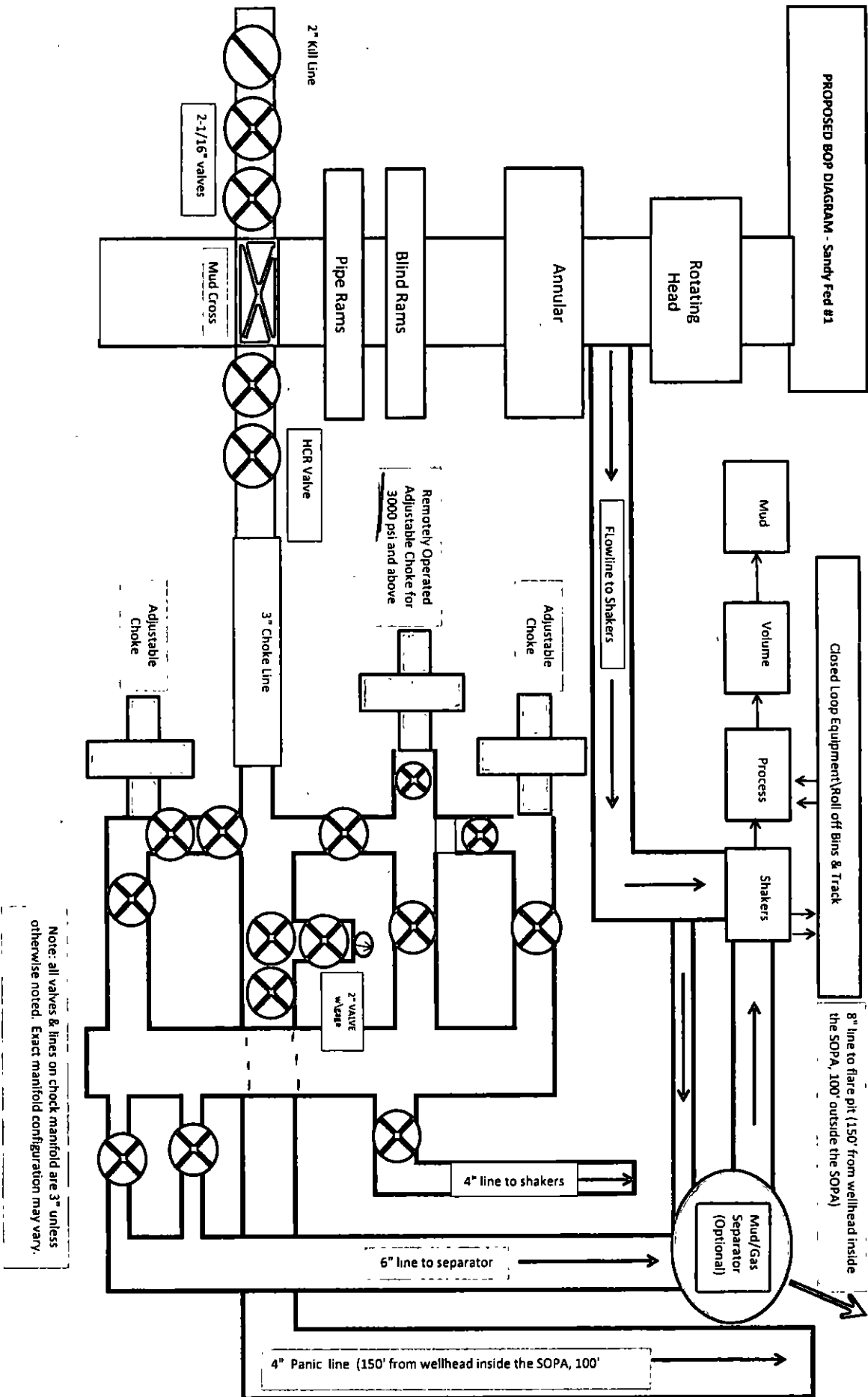
1. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) will consist of a two ram type (3000 psi WP) preventer and a bag-type (hydrill) preventer (3000 psi WP). The BOP will be equipped with blind rams on top and 4" drill pipe rams on bottom. The BOP's and accessory equipment will be tested to 3000 psi before cutting the window in the casing and drilling the lateral. The ram-type BOP and accessory equipment will be tested to 3000 psi and the hydrill to 70% of rated working pressure (2100 psi). Low pressure tests at 250 psi will be conducted prior to the high pressure test.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheet. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

2. Proposed Mud System: The casing will be loaded with "cut" brine (8.9-9.5 lb/gal) initially to cut the window in the casing. As the lateral is drilled, cut brine 8.9-9.2 lb/gal as required with sliders and gel sweeps sufficient mud materials to maintain weight, viscosity and combat lost circulation will be kept on location.

ATTACHMENT "A" Diagram



**7" X 3-M BOPE (2 Rams and Rotating Head) & Closed
Loop System Equipment Schematic**

SD Plan Report

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 13 2016

RECEIVED

SD Plan Report

Strata Production Comany

Field Name: *Eddy Co, NM Nad 83 NMEZ*

Site Name: *Sandy #1H*

Well Name: *Sandy #1H*

Plan: *P1:V1*

22 May 2015



Strata Production Company

Sandy #1H

Eddy Co, NM



Weatherford

Plan Data for Sandy #1H

Plan Point Information:

Dogleg Severity Unit: "/100.00ft - Position offsets from Slot centre

MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Eastng	VSec	OLS
(USft)	(")	(")	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)
0.00	0.00	0.00	0.00	0.00	0.00	470357.10	652333.70	0.00	0.00
7404.20	0.00	0.00	7404.20	0.00	0.00	470357.10	652333.70	0.00	0.00
7419.20	2.00	347.96	7419.20	0.26	-0.05	470357.36	652333.65	0.26	13.31
7424.20	2.00	347.96	7424.19	0.43	-0.09	470357.53	652333.61	0.44	0.80
7434.54	92.85	347.96	7433.65	265.97	-56.75	470623.07	652276.95	271.96	22.14
8003.79	92.85	347.96	7465.34	430.28	-91.80	470787.38	652241.90	439.96	0.01
8046.25	93.89	347.96	7462.78	472.71	-100.86	470829.81	652232.84	483.35	2.40
8078.85	93.89	347.96	7460.57	504.52	-107.64	470861.62	652226.06	515.87	0.00
8227.06	90.33	347.96	7455.12	649.34	-130.54	471006.44	652195.16	643.96	2.40
8420.21	90.33	347.96	7454.00	838.24	-178.85	471195.34	652154.85	857.11	0.00
8563.15	93.19	347.96	7449.61	977.95	-208.65	471335.05	652125.05	999.96	2.00
8592.70	93.19	347.96	7447.96	1006.80	-214.81	471363.90	652118.89	1029.46	0.00
8959.98	82.54	347.96	7461.63	1365.23	-291.28	471722.33	652042.42	1395.96	2.90
8971.01	82.54	347.96	7463.06	1375.97	-293.57	471733.03	652040.13	1406.90	0.00
9180.66	97.42	347.96	7463.13	1580.39	-337.19	471937.49	651996.51	1615.96	7.10
9212.08	97.42	347.96	7459.87	1610.86	-343.69	471967.96	651990.81	1647.12	0.00

Plan Data for Sandy #1H

Slot: Sandy #1H

Position:

Offset is from Site centre

+N/-S: 0.00USft Northing: 470357.10USft Latitude: 32°17'33.3"

+E/-W: 0.00USft Easting: 652333.70USft Longitude: -103°58'26.8"

Elevation Above VRD: 3257.00USft

Plan Data for Sandy #1H

Target Set Information:

Name: Sandy #1H

Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Eastng	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)		
13 272 FSL	7873.57	206.01	-56.75	470623.13	652276.94	Cuboid	
13 440 FSL	7668.22	430.11	-91.80	470787.38	652241.89	Cuboid	
13 648 FSL	7525.00	649.16	-130.55	471006.44	652195.17	Cuboid	
14 1000 FSL	7449.49	977.99	-208.66	471335.06	652125.04	Cuboid	
15 1396 FSL	7461.51	1365.17	-291.28	471722.37	652042.41	Cuboid	
16 1618 FSL	7463.01	1580.43	-337.19	471937.53	651996.50	Cuboid	
16 1618 FSL	7454.95	1610.90	-343.70	471968.00	651990.80	Cuboid	

Plan Data for Sandy #1H

Well: Sandy #1H

Type: Horizontal

File Number:

Plan Folder: P1

Vertical Section: Position offset of origin from Slot centre:

+N/-S: 0.00USft Azimuth: 347.00°

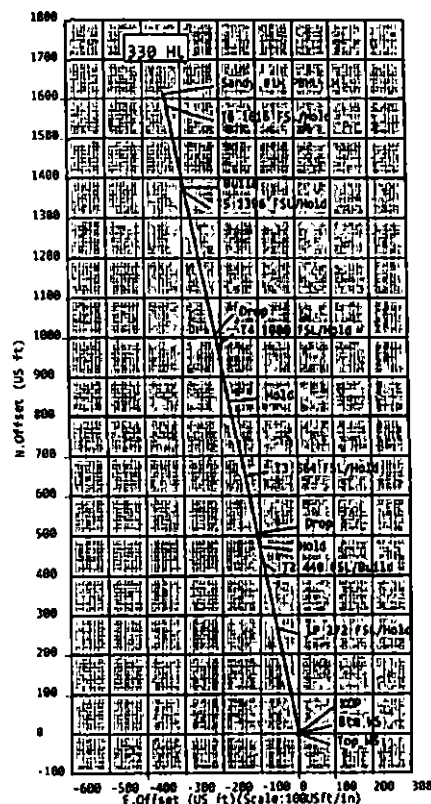
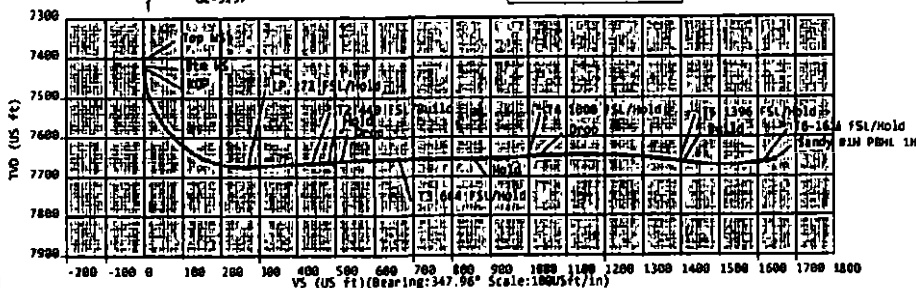
+E/-W: 0.00USft

Magnetic Parameters:

Model: Field Strength: Declination: DIP: Date:

9000 48329(mT) 7.00° 60.12° 2015-07-15

Sandy #1H



Sign Off: Russell Joyner

5D Plan Report

Sandy #1H

Field Name
 Eddy Co, NM
 Nad 83 FHEZ

Map Units : US ft
Company Name : Strata Production Company
Vertical Reference Datum (VRD) : Mean Sea Level
Projected Coordinate System : NAD83 / New Mexico East (RUS)
Comment :

Site Name
 Sandy #1H

Units : US ft **North Reference :** Grid **Convergence Angle :** 0.19
Position
 Northing: 470357.10 US ft Latitude: 32° 17' 33.27"
 Easting: 652333.70 US ft Longitude: -103° 58' 26.84"
Elevation above Mean Sea Level: 3257.00 US ft
Comment :

Slot Name
 Sandy #1H

Position (Offset) relative to Site Centre
 +N / -S: 0.00 US ft Northing: 470357.10 US ft Latitude: 32° 17' 33.27"
 +E / -W: 0.00 US ft Easting: 652333.70 US ft Longitude: -103° 58' 26.84"
Slot TVD Reference : Ground Elevation
Elevation above Mean Sea Level : 3257.00 US ft
Comment :

Well Name
 Sandy #1H

Type : Main well **UWI :** **Plan :** P1:V1
Rig Height Kelly Bushing : 15.00 US ft **Comment :**
Relative to Mean Sea Level: 3272.00 US ft
Closure Distance : 1647.12 US ft **Closure Azimuth :** 347.956°
Vertical Section (Position of Origin Relative to Slot)
 +N / -S: 0.00 US ft +E / -W: 0.00 US ft Az: 347.96°
Magnetic Parameters
Model : BGGM **Field Strength :** 48229.4nT **Dec :** 7.48° **Dip :** 60.12° **Date :** 15/Jul/2015

Target Set

Name : Sandy #1H **Number of Targets :** 7

Comment :

Target Name: ET 222Y81

Position (Relative to Slot centre)
 +N / -S: 286.01 US ft Northing: 470623.11 US ft Latitude: 32° 17' 35.90"
 +E / -W: -56.76 US ft Easting: 652276.94 US ft Longitude: -103° 58' 27.49"
Shape: TVD (Kelly Bushing) : 7673.57 US ft
Colour:

Orientation **Azimuth :** 0.00° **Inclination :** 0.00°
Dimensions **Length :** 0.00 US ft **Breadth :** 0.00 US ft **Height :** 0.00 US ft

5D Plan Report

Target Name:	Position (Relative to Slot centre)		
T2 440 FSL	+N / -S : 430.31 US ft	Northings : 470787.41 US ft	Latitude : 32°17'37.53"
	+E / -W : -91.81 US ft	Eastings : 652241.89 US ft	Longitude : -103°58'27.90"
Shape:	TVD (Kelly Bushing) : 7665.22 US ft		
Cuboid			
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 0.00 US ft	Height : 0.00 US ft
Target Name:	Position (Relative to Slot centre)		
T3 664 FSL	+N / -S : 649.38 US ft	Northings : 471008.48 US ft	Latitude : 32°17'39.70"
	+E / -W : -138.55 US ft	Eastings : 652195.15 US ft	Longitude : -103°58'28.43"
Shape:	TVD (Kelly Bushing) : 7655.00 US ft		
Cuboid			
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 0.00 US ft	Height : 0.00 US ft
Target Name:	Position (Relative to Slot centre)		
T4 1000 FSL	+N / -S : 977.99 US ft	Northings : 471335.09 US ft	Latitude : 32°17'42.95"
	+E / -W : -208.66 US ft	Eastings : 652125.04 US ft	Longitude : -103°58'29.24"
Shape:	TVD (Kelly Bushing) : 7649.49 US ft		
Cuboid			
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 0.00 US ft	Height : 0.00 US ft
Target Name:	Position (Relative to Slot centre)		
T5 1396 FSL	+N / -S : 1365.27 US ft	Northings : 471722.37 US ft	Latitude : 32°17'46.79"
	+E / -W : -291.29 US ft	Eastings : 652042.41 US ft	Longitude : -103°58'30.18"
Shape:	TVD (Kelly Bushing) : 7661.51 US ft		
Cuboid			
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 0.00 US ft	Height : 0.00 US ft
Target Name:	Position (Relative to Slot centre)		
T6 1616 FSL	+N / -S : 1580.43 US ft	Northings : 471937.53 US ft	Latitude : 32°17'48.92"
	+E / -W : -337.20 US ft	Eastings : 651996.50 US ft	Longitude : -103°58'30.71"
Shape:	TVD (Kelly Bushing) : 7663.01 US ft		
Cuboid			
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 0.00 US ft	Height : 0.00 US ft

SD Plan Report

Target Name:	Position (Relative to Slot centre)		
PBHL 1H	+N/-S : 1610.90 US ft	Northing : 471958.00 US ft	Latitude : 32°17'49.22"
Shape:	+E/-W : -343.70 US ft	Eastings : 651990.00 US ft	Longitude : -103°58'30.78"
Curved	TVD (Kelly Bushing) : 7658.95 US ft		
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 0.00 US ft	Height : 0.00 US ft

Well path created using minimum curvature

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
ID (US ft)	Incl (°)	Az (°)	TVD (US ft)	North (US ft)	East (US ft)	VS (US ft)	DGS (%/100 US ft)	B.Rate (%/100 US ft)	L.Tag (%/100 US ft)	L.Tag (°)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7404.20	0.00	0.00	7404.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Top WS
7419.20	2.00	347.96	7419.20	0.26	-0.05	0.26	13.33	13.33	0.00	347.96	Butt WS
7424.20	2.00	347.96	7424.19	0.43	-0.09	0.44	0.00	0.00	0.00	0.00	XOP
7834.58	92.85	347.96	7673.65	265.97	-56.75	271.96	22.14	22.14	-0.00	0.00	LP 272 FSL/Hold
8002.79	92.85	347.96	7665.34	430.28	-91.80	439.96	0.01	0.01	0.00	0.00	T2 440 FSL/Build
8046.25	93.89	347.96	7662.78	472.71	-100.86	483.35	2.40	2.40	0.00	0.01	Hold
8078.85	93.89	347.96	7660.57	504.52	-107.64	515.87	0.00	0.00	0.00	0.00	Drop
8227.06	90.33	347.96	7655.12	649.34	-138.54	663.96	2.40	-2.40	-0.00	180.01	T3 664 FSL/Hold
8420.21	90.33	347.96	7654.00	838.24	-178.85	857.11	0.00	0.00	0.00	0.00	Hold
8563.15	93.19	347.96	7649.61	977.95	-208.65	999.96	2.00	2.00	0.00	0.02	T4 1000 FSL/Hold
8592.70	93.19	347.96	7647.96	1006.80	-214.81	1029.46	0.00	0.00	0.00	0.00	Drop
8959.98	82.54	347.96	7661.63	1365.23	-291.28	1395.96	2.90	-2.90	-0.00	180.01	T5 1396 FSL/Hold
8971.01	82.54	347.96	7663.06	1375.93	-293.57	1406.90	0.00	0.00	0.00	0.00	Build
9180.66	97.42	347.96	7663.13	1580.39	-337.19	1615.96	7.10	7.10	0.00	0.01	T6 1616 FSL/Hold
9212.08	97.42	347.96	7659.07	1610.86	-343.69	1647.12	0.00	0.00	0.00	0.00	Sandy #1H PBHL 1H

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
ID (US ft)	Incl (°)	Az (°)	TVD (US ft)	North (US ft)	East (US ft)	VS (US ft)	DGS (%/100 US ft)	North (US ft)	East (US ft)	Comments
7400.00	0.00	0.00	7400.00	0.00	0.00	0.00	0.00	470357.10	652333.70	
7404.20	0.00	0.00	7404.20	0.00	0.00	0.00	0.00	470357.10	652333.70	Top WS
7419.20	2.00	347.96	7419.20	0.26	-0.05	0.26	13.33	470357.36	652333.65	Butt WS
7424.20	2.00	347.96	7424.19	0.43	-0.09	0.44	0.00	470357.53	652333.61	XOP
7500.00	18.78	347.96	7498.48	13.75	-2.93	14.06	22.14	470370.85	652330.77	
7600.00	40.92	347.96	7584.68	62.12	-13.25	63.52	22.14	470419.22	652320.45	
7700.00	63.06	347.96	7645.88	138.70	-29.59	141.82	22.14	470495.80	652304.11	
7800.00	85.20	347.96	7673.06	232.18	-49.54	237.41	22.14	470589.28	652284.16	
7834.58	92.85	347.96	7673.65	265.97	-56.75	271.96	22.14	470623.07	652276.95	LP 272 FSL/Hold
7900.00	92.83	347.96	7670.43	329.87	-70.38	337.30	0.03	470686.97	652263.32	
8000.00	92.85	347.96	7665.48	427.55	-91.22	437.18	0.01	470784.65	652242.48	
8002.79	92.85	347.96	7665.34	430.28	-91.80	439.96	0.00	470787.38	652241.90	T2 440 FSL/Build
8046.25	93.89	347.96	7662.78	472.71	-100.86	483.35	2.40	470829.81	652232.84	Hold
8078.85	93.89	347.96	7660.57	504.52	-107.64	515.87	0.00	470861.62	652226.06	Drop
8100.00	93.38	347.96	7659.23	525.16	-112.05	536.98	2.40	470882.26	652221.65	
8200.00	90.98	347.96	7655.43	622.88	-132.90	636.90	2.40	470979.98	652200.80	
8227.06	90.33	347.96	7655.12	649.34	-138.54	663.96	2.40	471006.44	652195.16	T3 664 FSL/Hold

SD Plan Report

Interpolated Points (Relative to Slot centre, 1VD relative to Kelly Bushing)										
YD (105 ft)	Inc (°)	Az (°)	1VD (105 ft)	U,005.4 (105 ft)	U,005.4 (105 ft)	YS (105 ft)	EUS (°/105 105 ft)	Eastlong (105 ft)	Eastlong (105 ft)	Comment
8300.00	90.33	347.96	7654.70	720.68	-153.76	736.90	0.00	471077.78	652179.94	
8400.00	90.33	347.96	7654.12	818.47	-174.63	836.90	0.00	471175.57	652159.07	
8420.21	90.33	347.96	7654.00	838.24	-178.85	857.11	0.00	471195.34	652154.85	Hold
8500.00	91.93	347.96	7652.43	916.25	-195.49	936.88	2.00	471273.35	652138.21	
8563.15	93.19	347.96	7649.61	977.95	-208.65	999.96	2.00	471335.05	652125.05	T4 1000 FSL/Hold
8592.70	93.19	347.96	7647.96	1006.80	-214.81	1029.46	0.00	471363.90	652118.89	Drop
8600.00	92.98	347.96	7647.57	1013.93	-216.33	1036.76	2.90	471371.03	652117.37	
8700.00	90.08	347.96	7644.90	1111.69	-237.19	1136.71	2.90	471468.79	652096.51	
8800.00	87.18	347.96	7647.30	1209.45	-258.05	1236.67	2.90	471566.55	652075.65	
8900.00	84.28	347.96	7654.74	1306.97	-278.85	1336.38	2.90	471664.07	652054.85	
8959.98	82.54	347.96	7661.63	1365.23	-291.28	1395.96	2.90	471722.33	652042.42	T5 1396 FSL/Hold
8971.01	82.54	347.96	7663.06	1375.93	-293.57	1406.90	0.00	471733.03	652040.13	Build
9000.00	84.60	347.96	7666.31	1404.10	-299.58	1435.71	7.10	471761.20	652034.12	
9100.00	91.70	347.96	7669.54	1501.79	-320.42	1535.59	7.10	471858.89	652013.28	
9180.66	97.42	347.96	7663.13	1580.39	-337.19	1615.96	7.10	471937.49	651996.51	T6 1616 FSL/Hold
9200.00	97.42	347.96	7660.63	1599.15	-341.19	1635.14	0.00	471956.25	651992.51	
9212.08	97.42	347.96	7659.07	1610.86	-343.69	1647.12	0.00	471967.96	651990.01	Sandy #1H PBHL 1H

**Weatherford****Weatherford Drilling Services**

GeoDec4 v2.1.0.0

Report Date: May 22, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Sandy #1H
API Number: _____
Rig Name: _____
Location: Eddy Co, NM Nad83 NME
Block: _____
Engineer: RWJ

NAD83 / New Mexico East (ftUS)	NAD83 (1986)
Projected Coordinate System	Geodetic Coordinate System
Datum: North American Datum 1983 (1986)	Datum: North American Datum 1983 (1986)
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
EPSG: 2257	EPSG: 4269
North: 470357.10 US Survey Foot	Latitude: 32.292574 Degree
East: 652333.70 US Survey Foot	Longitude: -103.974123 Degree
Convergence: 0.19°	
Declination: 7.48°	
Total Correction: 7.29°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 17' 33.27" N
Longitude = 103° 58' 26.84" W

Magnetic Declination = 7.48 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6567
Local Field Strength = 48229 nT	Magnetic Vector X = 23823 nT
Magnetic Dip = 60.12 deg	Magnetic Vector Y = 3129 nT
Magnetic Model = bggm2015.dat	Magnetic Vector Z = 41818 nT
Run Date = July 15, 2015	Magnetic Vector H = 24028 nT

Signed: _____ Date: _____

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**PECOS DISTRICT
CONDITIONS OF APPROVAL**

**NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 13 2016**

OPERATOR'S NAME:	Strata Production Company
LEASE NO.:	NM 114356
WELL NAME & NO.:	Sandy Fed #1
SURFACE HOLE FOOTAGE:	1979' FNL & 0660' FWL
BOTTOM HOLE FOOTAGE:	0330' FNL & 0330' FWL
LOCATION:	Section 24, T. 23 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

RECEIVED

I. DRILLING HORIZONTAL LATERAL

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 casing liner (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. **Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.**
2. **Unless the liner 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 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.**

A. LINER

Changes to the approved SUNDRY liner 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.

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.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

Existing Casing Program:

1. The 16 inch, 65.00 #/ft, H-40 surface casing is set at 465 feet with cement (425 sacks) circulated to surface.
2. The 10 3/4 inch 51.00 #/ft, K-55 intermediate casing is set at 3900 feet with cement (2950 sacks) circulated to surface.
3. The 7 5/8 inch 26.40 #/ft, N-80 production casing with a CIBP set at 8000 feet and cement circulated to surface.

Proposed Liner:

4. The minimum required fill of cement behind the 4 1/2 inch liner is:
 - ☒ Cement should tie-back at least 100 feet into previous casing string. Operator shall provide method of verification.
5. 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.
6. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. 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 53.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling the horizontal lateral shoe shall be **3000 (3M) psi**. The BOP must be tested prior to
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done prior to performing operations by an independent service company utilizing a test plug **not a cup or J-packer**.
 - b. 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. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

C. 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.

CRW 082916