Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
Operator Copy

HOBBSOCD
JAN 10 2020
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

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 page 2

5. Lease Serial No.
NMNM 77090

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.
JULIET FEDERAL COM 504H

2. Name of Operator
CENTENNIAL RESOURCE PRODUCTION
Contact: KANICIA SCHLICHTING
Mail: kanicia.schlichting@cdevinc.com

9. API Well No.
30-025-45576-00-X1

3a. Address
1001 17TH STREET SUITE 1800
DENVER, CO 80202

3b. Phone No. (include area code)
Ph: 720.499.1537

10. Field and Pool or Exploratory Area
OJO CHISO

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 22 T24S R34E Tract C 400FNL 2160FWL
32.209187 N Lat, 103.459404 W Lon

11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Centennial Resource Production respectfully requests to change the surface hole location of this well as follows:

Current SHL: Unit C, Sec 22, T24S, R34E, 400' FNL & 2160' FWL, Lea County, NM.

New SHL: Unit C, Sec 22, T24S, R34, 400' FNL & 1413' FWL, Lea County, NM.

Please see the attached new C-102, directional survey, multi-bowl procedure and updated casing/cement info.

Please See Attached COAs

Engineering Approved JSP 12/15/2019 All Previous COAs Still Apply, Except for the Following:
Surface good. MR. 12/12/2019. Same Stipulations Apply

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

Electronic Submission #495224 verified by the BLM Well Information System
For CENTENNIAL RESOURCE PRODUCTION, sent to the Hobbs
Committed to AFMSS for processing by JUANA MEDRANO on 12/11/2019 (20JM0041SE)

Name *(Printed/Typed)* KANICIA SCHLICHTING — Title SR REGULATORY ANALYST

Signature (Electronic Submission) — Date 12/10/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title AFM-LEM Date 12/16/2019

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-45576	96434	Red Hills; Bone Spring, North

4 Property Code	5 Property Name	6 Well Number
318012	JULIET FEDERAL COM	504H

7 OGRID No.	8 Operator Name	9 Elevation
372165	CENTENNIAL RESOURCE PRODUCTION, LLC	3533.3'

10 Surface Location

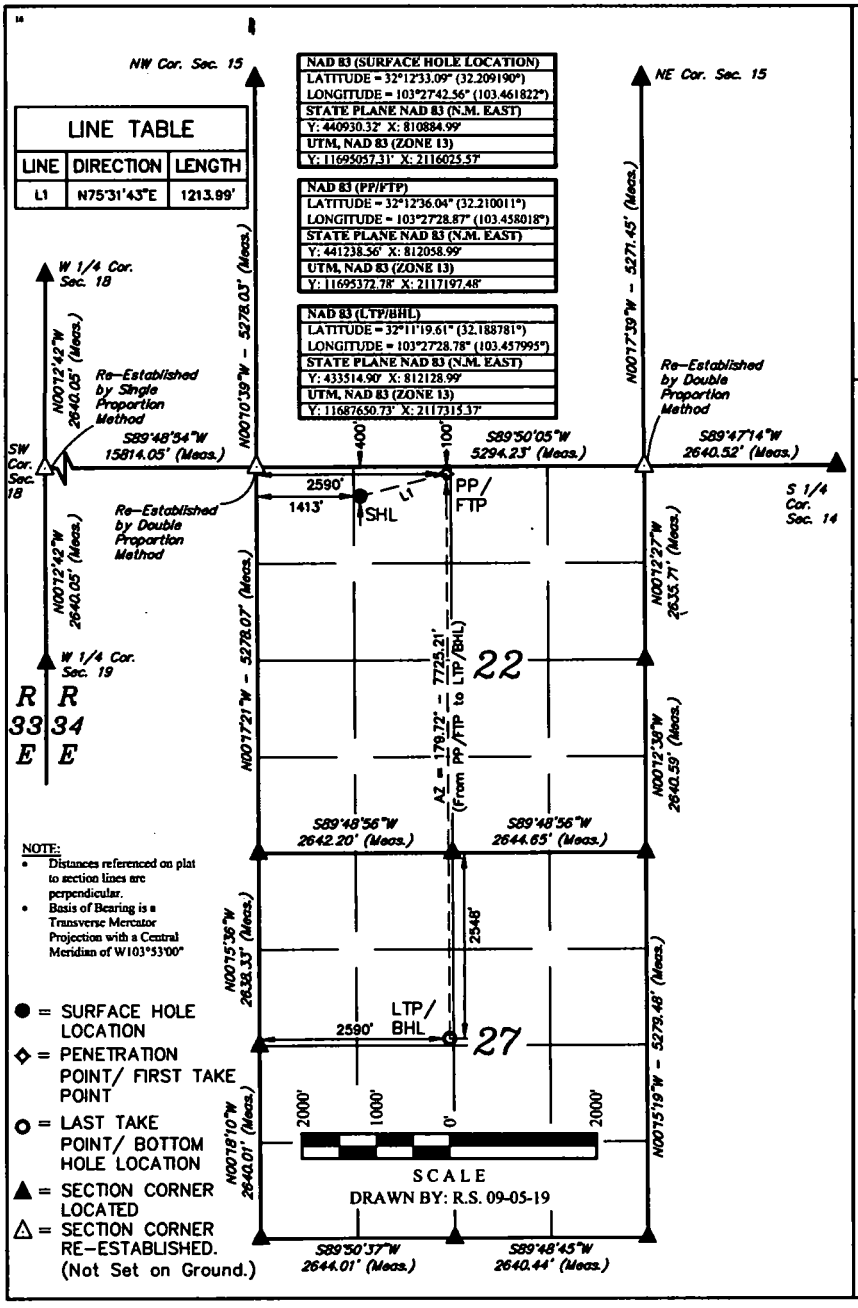
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	22	24S	34E		400	NORTH	1413	WEST	LEA

11 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
F	27	24S	34E		2548	NORTH	2590	WEST	LEA

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
240			

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.



17 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: 12/10/19

Kanicia Schlichting
Printed Name

kanicia.schlichting@cdevinc.com
E-mail Address

18 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 supervision, and that the same is true and correct to the best of my belief.

AUGUST 27, 2019
Date of Survey

Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
09-05-19
PROFESSIONAL SURVEYOR

Certificate Number:

Juliet Federal Com 504H Updated casing and cement

Casing

Casing Id	String Type	Hole Size	Casing Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	Conductor	26	20	New	API	N	0	120	0	3532	3412	120	H40	94	Weld						
2	surface	17.5	13.375	New	API	N	0	1350	0	3532	2182	1350	J55	54.5	BTC	1.70	23.29	Dry	11.59	Dry	11.59
3	Intermediate	12.25	9.625	New	API	N	0	5411	0	3532	-1868	5411	J55	40	LTC	1.30	8.42	Dry	2.41	Dry	2.92
4	Production	8.75	5.5	New	API	N	0	11678	0	3532	-7718	11678	P110 RY	20	TCBC-HT	1.90	12.93	Dry	2.85	Dry	2.85
5	Production	8.5	5.5	New	API	N	11678	18827	11250	-7718	-7718	7149	P 110 RY	20	TCBC-HT	1.90	12.93	Dry	2.85	Dry	2.85

Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity (sx)	Yield	Density	Cu FT	Excess %	Cement Type	Additives
Conductor	Lead		0	120	121	1.49	12.9	181		Grout	Bentonite 4% BWOC, Cellophane #/sx, CaCl2 2% BWOC.
Surface	Lead		0	850	679	1.74	13.5	1181		Class C Pre	Premium Gel Bentonite 4%, C-45 Econolite 0.25%, Phenoseal 0.25#/sk, CaCl 1%, Defoamer C-41P 0.75%
Surface	Tail		850	1350	518	1.34	14.8	695		Class C Pre	C-45 Econolite 0.10%, CaCl 1.0%
Intermediate	Lead		0	4911	1166	3.44	10.7	4012		TXI Light w	Salt 1.77/sk, C-45 Econolite 2.25%, STE 6.00%, Citric Acid 0.18%, C-19 0.10%, CSA-1000 0.20%, C-530P 0.30%, CTB-15 LCM 7#/sk, Gyp Seal 8#/sk
Intermediate	Tail		4911	5411	141	1.33	14.8	188		Class C Pre	C-45 Econolite 0.10%, Citric acid 0.05%, C503P 0.25%
Production	Lead		0	10778	1055	3.41	10.6	3596		TXI Light w	Salt 8.98#/sk, STE 6.00%, Citric acid 0.20%, CSA-1000 0.25%, C47B 0.10%, C-503P 0.30%
Production	Tail		10778	18827	1880	1.24	14.2	2331		50:25:25 Cl	Citric acid 0.03%, CSA-1000 0.05%, C47B 0.25%, C-503P 0.30%

Circulating Medium Table

	Top Depth	Bottom Depth	Mud Type	Min weight (l	Max weight (lbs./gal.)
Surface	0	1350	FW	8.6	9.5
Intermediate	1350	5411	Brine	9	10
Production	5411	18827	Brine/OBM	8.8	10

H.I.S.
HOUSTON INTERNATIONAL SPECIALTY, INC
PREMIUM CONNECTIONS

Size	5.5
Grade	P110 RY
Weight	20

TCBC-HT

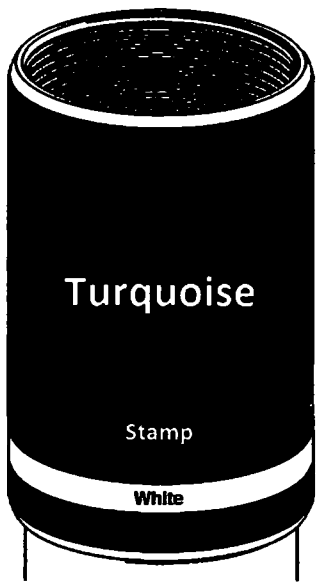
SeAH Steel

	Coupling and Pipe Dimensions (in)					
	Outer Diameter	Inner Diameter	Coupling Length	Make-up Loss	Wall Thickness	Drift Diameter
Coupling	6.300	5.383	8.250	4.125	0.361	4.653
Pipe		4.778				
Pin		4.778				

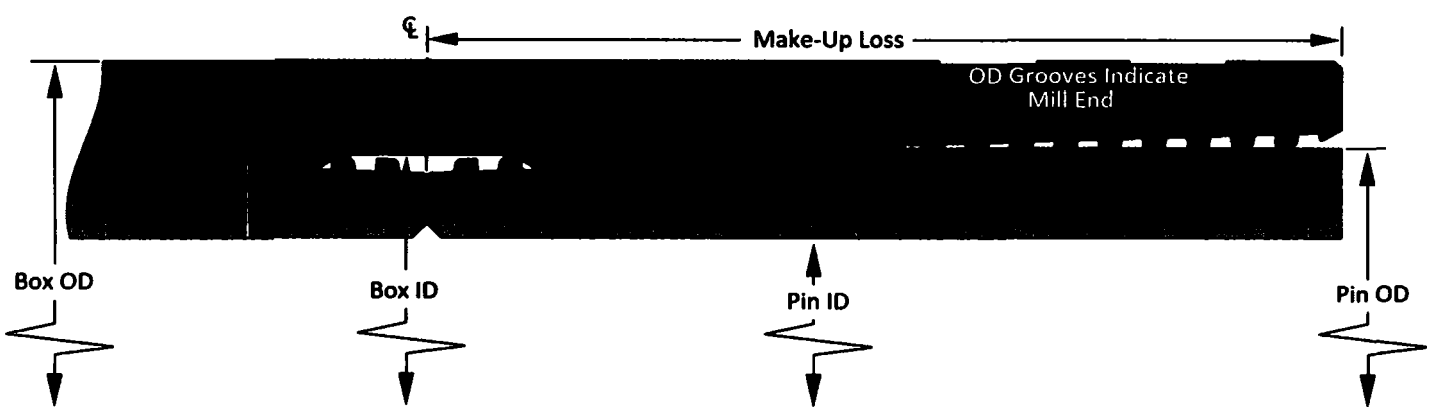
Torque Values (ft-lbs)				
Field End Make-Up			Max. Working Torque [1]	Yield Torque
Minimum	Optimum [2]	Maximum		
10,000	13,500	18,500	22,250	25,200

Yield Stress (x1000 lbs.)	
Tensile	Compressive
100%	100%

Maximum Pressure (psi)	
Internal	External
100%	100%



[1] Max. Working Torque value is not to be exceeded during operation.
[2] If Optimum Torque does not meet the Base of Triangle Stamp, M/U to the Base of Triangle.



*Data are for information purposes only. Though HIS has made efforts to ensure accuracy, HIS makes no warranty for loss or damage due to its use.

Rev 0

19996 Hickory Twig Way Spring, TX 77388
Phone: (281) 602-7550
Fax: (281) 602-7557

SĕAH

5.5" 20# .361" P-110 Restricted Yield (RY)

Dimensions (Nominal)

Outside Diameter	5.500	in.
Wall	0.361	in.
Inside Diameter	4.778	in.
Drift	4.653	in.
Weight, T&C	20.000	lbs/ft
Weight, PE	19.830	lbs/ft

Performance Properties (Minimum)

Minimum Yield Strength	110000	psi
Maximum Yield Strength	125000	psi
Collapse, PE	11100	psi
Internal Yield Pressure		
PE	12630	psi
LTC	12360	psi
BTC	12360	psi
Yield Strength, Pipe Body	641	1000 lbs
Joint Strength		
LTC	548	1000 lbs
BTC	667	1000 lbs

NEW MEXICO

LEA
JULIET FEDERAL COM
JULIET FEDERAL COM 504H

JULIET FEDERAL COM 504H

Plan: PWP0

Survey Report - Geographic

11 November, 2019

CENTENNIAL
RESOURCE DEVELOPMENT, INC

ROMEO_JULIET DEVELOPMENT
Site: ROMEO_JULIET FEDERAL COM
Wells: ROMEO 502H_JULIET FEDERAL COM 503H_504H
Design: APD PLAN

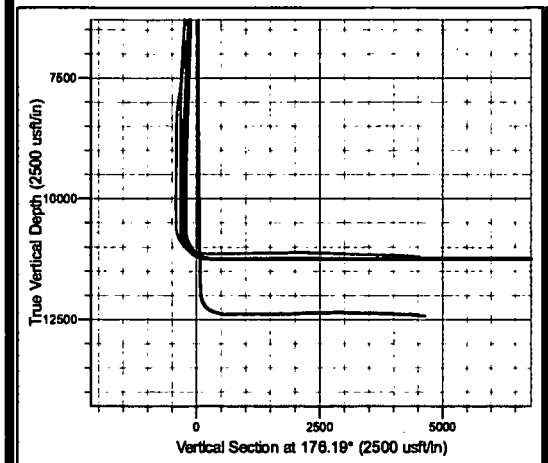
PROJECT DETAILS: LEA COUNTY

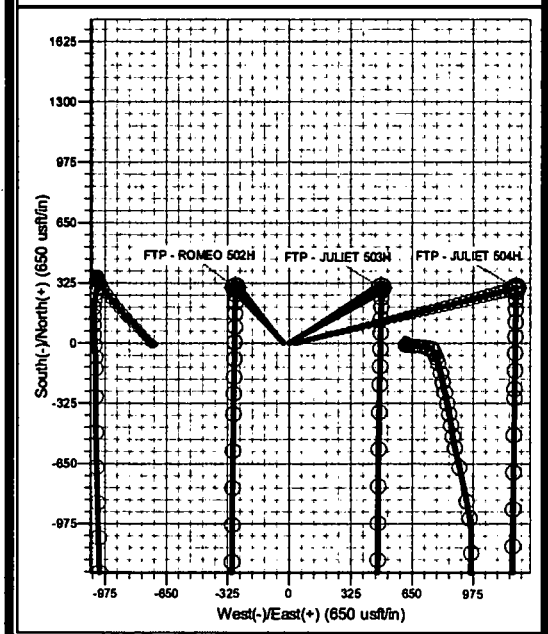
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Zone 13N (108 W to 102 W)

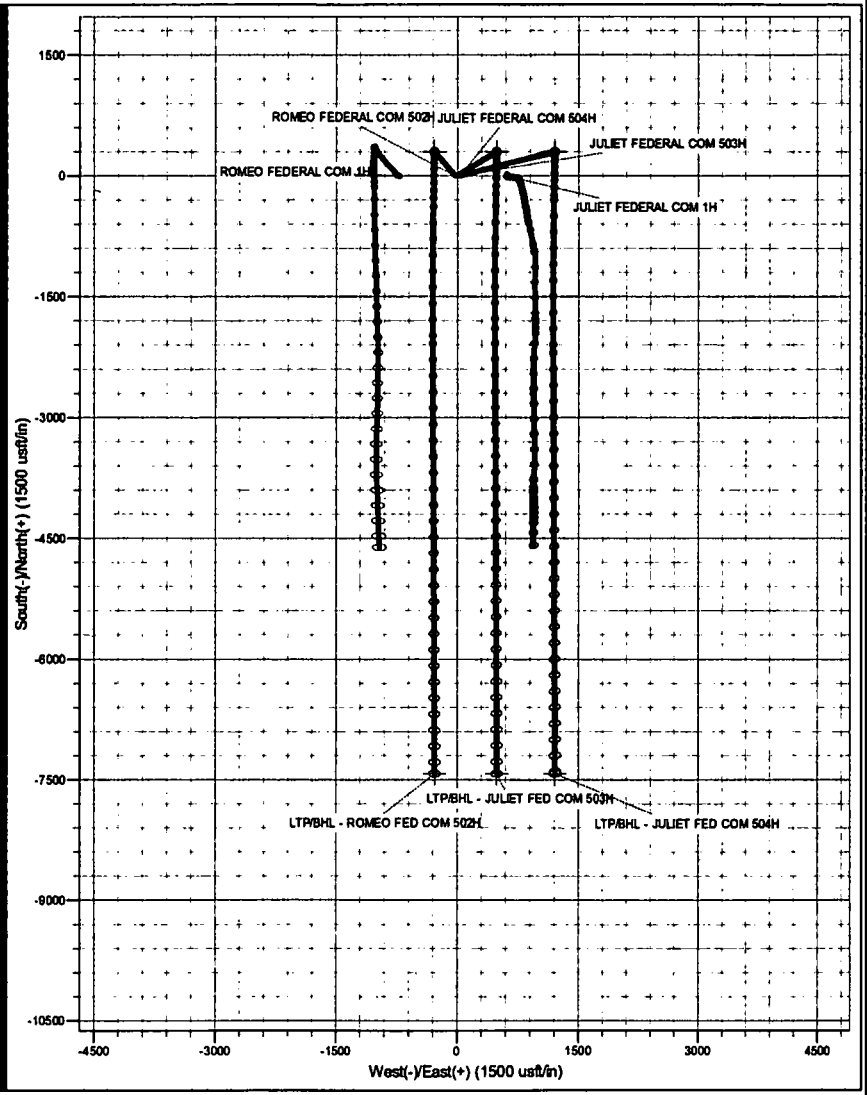
System Datum: Mean Sea Level

Azimuths to True North
Magnetic North: 7.70°

Magnetic Field
Strength: 48795.3nT
Dip Angle: 60.25°
Date: 11/6/2018
Model: IGRF200510







Centennial Resource Dev

Survey Report - Geographic

Company:	NEW MEXICO	**Local Co-ordinate Reference:**	Well JULIET FEDERAL COM 504H
Project:	LEA	**TVD Reference:**	RKB=3533.3+25 @ 3558.3usft
Site:	JULIET FEDERAL COM	**MD Reference:**	RKB=3533.3+25 @ 3558.3usft
Well:	JULIET FEDERAL COM 504H	**North Reference:**	True
Wellbore:	JULIET FEDERAL COM 504H	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP0	**Database:**	Compass

Project	LEA		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	JULIET FEDERAL COM				
Site Position:		**Northing:**	0.00 usft	**Latitude:**	0° 0' 0.000 N
From:	Map	**Easting:**	0.00 usft	**Longitude:**	109° 29' 19.478 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.00 °

Well	JULIET FEDERAL COM 504H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	11,695,057.31 usft	**Latitude:**	32° 12' 33.086 N
	+E/-W	0.0 usft	**Easting:**	2,116,025.57 usft	**Longitude:**	103° 27' 42.559 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,533.3 usft

Wellbore	JULIET FEDERAL COM 504H				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	12/31/2009	7.70	60.25	48,795.27976335

Design	PWP0				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	170.94	

Survey Tool Program **Date** 11/8/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,827.1	PWP0 (JULIET FEDERAL COM 504H)	MWD+IFR1+MS	OWSG_Rev2_ MWD + IFR1 + Multi-Station Correction

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
3,000.0	10.00	75.80	2,994.9	21.4	84.4	11,695,079.87	2,116,109.64	32° 12' 33.297 N	103° 27' 41.577 W
8,987.0	10.00	75.80	8,891.0	276.4	1,092.3	11,695,349.30	2,117,113.75	32° 12' 35.821 N	103° 27' 29.844 W
9,987.0	0.00	0.00	9,885.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,778.0	0.00	0.00	10,676.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
11,678.2	90.00	180.88	11,250.0	-275.3	1,167.8	11,694,798.76	2,117,197.22	32° 12' 30.361 N	103° 27' 28.965 W
13,520.5	90.00	179.72	11,250.0	-2,117.5	1,158.1	11,692,956.60	2,117,213.88	32° 12' 12.129 N	103° 27' 29.079 W
18,827.3	90.00	179.72	11,250.0	-7,424.3	1,183.7	11,687,650.73	2,117,315.37	32° 11' 19.610 N	103° 27' 28.783 W

Centennial Resource Dev

Survey Report - Geographic

Company:	NEW MEXICO	**Local Co-ordinate Reference:**	Well JULIET FEDERAL COM 504H
Project:	LEA	**TVD Reference:**	RKB=3533.3+25 @ 3558.3usft
Site:	JULIET FEDERAL COM	**MD Reference:**	RKB=3533.3+25 @ 3558.3usft
Well:	JULIET FEDERAL COM 504H	**North Reference:**	True
Wellbore:	JULIET FEDERAL COM 504H	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP0	**Database:**	Compass

Project	LEA		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	JULIET FEDERAL COM				
Site Position:		**Northing:**	0.00 usft	**Latitude:**	0° 0' 0.000 N
From:	Map	**Easting:**	0.00 usft	**Longitude:**	109° 29' 19.478 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.00 °

Well	JULIET FEDERAL COM 504H				
Well Position	**+N/-S**	0.0 usft	**Northing:**	11,695,057.31 usft	**Latitude:**	32° 12' 33.086 N
	+E/-W	0.0 usft	**Easting:**	2,116,025.57 usft	**Longitude:**	103° 27' 42.559 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,533.3 usft

Wellbore	JULIET FEDERAL COM 504H			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	12/31/2009	7.70	60.25	48,795.27976335

Design	PWP0				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	170.94	

Survey Tool Program **Date** 11/8/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,827.1	PWP0 (JULIET FEDERAL COM 504H)	MWD+IFR1+MS	OWSG_Rev2_ MWD + IFR1 + Multi-Station Correction

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
100.0	0.00	0.00	100.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
200.0	0.00	0.00	200.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
300.0	0.00	0.00	300.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
400.0	0.00	0.00	400.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
500.0	0.00	0.00	500.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
600.0	0.00	0.00	600.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
700.0	0.00	0.00	700.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
800.0	0.00	0.00	800.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
900.0	0.00	0.00	900.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W

Centennial Resource Dev

Survey Report - Geographic

Company:	NEW MEXICO	**Local Co-ordinate Reference:**	Well JULIET FEDERAL COM 504H
Project:	LEA	**TVD Reference:**	RKB=3533.3+25 @ 3558.3usft
Site:	JULIET FEDERAL COM	**MD Reference:**	RKB=3533.3+25 @ 3558.3usft
Well:	JULIET FEDERAL COM 504H	**North Reference:**	True
Wellbore:	JULIET FEDERAL COM 504H	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP0	**Database:**	Compass

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,200.0	0.00	0.00	1,200.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	11,695,057.31	2,116,025.57	32° 12' 33.086 N	103° 27' 42.559 W
2,100.0	1.00	75.80	2,100.0	0.2	0.8	11,695,057.54	2,116,026.41	32° 12' 33.088 N	103° 27' 42.549 W
2,200.0	2.00	75.80	2,200.0	0.9	3.4	11,695,058.22	2,116,028.94	32° 12' 33.094 N	103° 27' 42.519 W
2,300.0	3.00	75.80	2,299.9	1.9	7.6	11,695,059.35	2,116,033.15	32° 12' 33.105 N	103° 27' 42.470 W
2,400.0	4.00	75.80	2,399.7	3.4	13.5	11,695,060.93	2,116,039.05	32° 12' 33.119 N	103° 27' 42.401 W
2,500.0	5.00	75.80	2,499.4	5.3	21.1	11,695,062.96	2,116,046.63	32° 12' 33.139 N	103° 27' 42.313 W
2,600.0	6.00	75.80	2,598.9	7.7	30.4	11,695,065.45	2,116,055.88	32° 12' 33.162 N	103° 27' 42.205 W
2,700.0	7.00	75.80	2,698.3	10.5	41.4	11,695,068.38	2,116,066.82	32° 12' 33.189 N	103° 27' 42.077 W
2,800.0	8.00	75.80	2,797.4	13.7	54.1	11,695,071.76	2,116,079.42	32° 12' 33.221 N	103° 27' 41.930 W
2,900.0	9.00	75.80	2,896.3	17.3	68.4	11,695,075.59	2,116,093.70	32° 12' 33.257 N	103° 27' 41.763 W
3,000.0	10.00	75.80	2,994.9	21.4	84.4	11,695,079.87	2,116,109.64	32° 12' 33.297 N	103° 27' 41.577 W
3,100.0	10.00	75.80	3,093.4	25.6	101.2	11,695,084.37	2,116,126.41	32° 12' 33.339 N	103° 27' 41.381 W
3,200.0	10.00	75.80	3,191.9	29.9	118.1	11,695,088.87	2,116,143.18	32° 12' 33.381 N	103° 27' 41.185 W
3,300.0	10.00	75.80	3,290.4	34.1	134.9	11,695,093.37	2,116,159.95	32° 12' 33.423 N	103° 27' 40.989 W
3,400.0	10.00	75.80	3,388.9	38.4	151.7	11,695,097.87	2,116,176.72	32° 12' 33.466 N	103° 27' 40.793 W
3,500.0	10.00	75.80	3,487.3	42.7	168.6	11,695,102.37	2,116,193.50	32° 12' 33.508 N	103° 27' 40.597 W
3,600.0	10.00	75.80	3,585.8	46.9	185.4	11,695,106.87	2,116,210.27	32° 12' 33.550 N	103° 27' 40.401 W
3,700.0	10.00	75.80	3,684.3	51.2	202.2	11,695,111.37	2,116,227.04	32° 12' 33.592 N	103° 27' 40.205 W
3,800.0	10.00	75.80	3,782.8	55.4	219.1	11,695,115.87	2,116,243.81	32° 12' 33.634 N	103° 27' 40.009 W
3,900.0	10.00	75.80	3,881.3	59.7	235.9	11,695,120.37	2,116,260.58	32° 12' 33.676 N	103° 27' 39.813 W
4,000.0	10.00	75.80	3,979.7	64.0	252.7	11,695,124.87	2,116,277.35	32° 12' 33.718 N	103° 27' 39.617 W
4,100.0	10.00	75.80	4,078.2	68.2	269.6	11,695,129.37	2,116,294.13	32° 12' 33.761 N	103° 27' 39.421 W
4,200.0	10.00	75.80	4,176.7	72.5	286.4	11,695,133.87	2,116,310.90	32° 12' 33.803 N	103° 27' 39.225 W
4,300.0	10.00	75.80	4,275.2	76.7	303.2	11,695,138.37	2,116,327.67	32° 12' 33.845 N	103° 27' 39.029 W
4,400.0	10.00	75.80	4,373.7	81.0	320.1	11,695,142.87	2,116,344.44	32° 12' 33.887 N	103° 27' 38.833 W
4,500.0	10.00	75.80	4,472.1	85.2	336.9	11,695,147.37	2,116,361.21	32° 12' 33.929 N	103° 27' 38.637 W
4,600.0	10.00	75.80	4,570.6	89.5	353.7	11,695,151.87	2,116,377.98	32° 12' 33.971 N	103° 27' 38.441 W
4,700.0	10.00	75.80	4,669.1	93.8	370.6	11,695,156.37	2,116,394.75	32° 12' 34.014 N	103° 27' 38.245 W
4,800.0	10.00	75.80	4,767.6	98.0	387.4	11,695,160.87	2,116,411.53	32° 12' 34.056 N	103° 27' 38.049 W
4,900.0	10.00	75.80	4,866.1	102.3	404.2	11,695,165.37	2,116,428.30	32° 12' 34.098 N	103° 27' 37.853 W
5,000.0	10.00	75.80	4,964.5	106.5	421.1	11,695,169.87	2,116,445.07	32° 12' 34.140 N	103° 27' 37.657 W
5,100.0	10.00	75.80	5,063.0	110.8	437.9	11,695,174.37	2,116,461.84	32° 12' 34.182 N	103° 27' 37.461 W
5,200.0	10.00	75.80	5,161.5	115.1	454.7	11,695,178.87	2,116,478.61	32° 12' 34.224 N	103° 27' 37.265 W
5,300.0	10.00	75.80	5,260.0	119.3	471.6	11,695,183.37	2,116,495.38	32° 12' 34.266 N	103° 27' 37.069 W
5,400.0	10.00	75.80	5,358.5	123.6	488.4	11,695,187.88	2,116,512.16	32° 12' 34.309 N	103° 27' 36.874 W
5,500.0	10.00	75.80	5,457.0	127.8	505.2	11,695,192.38	2,116,528.93	32° 12' 34.351 N	103° 27' 36.678 W
5,600.0	10.00	75.80	5,555.4	132.1	522.1	11,695,196.88	2,116,545.70	32° 12' 34.393 N	103° 27' 36.482 W
5,700.0	10.00	75.80	5,653.9	136.4	538.9	11,695,201.38	2,116,562.47	32° 12' 34.435 N	103° 27' 36.286 W
5,800.0	10.00	75.80	5,752.4	140.6	555.7	11,695,205.88	2,116,579.24	32° 12' 34.477 N	103° 27' 36.090 W
5,900.0	10.00	75.80	5,850.9	144.9	572.6	11,695,210.38	2,116,596.01	32° 12' 34.519 N	103° 27' 35.894 W
6,000.0	10.00	75.80	5,949.4	149.1	589.4	11,695,214.88	2,116,612.79	32° 12' 34.562 N	103° 27' 35.698 W
6,100.0	10.00	75.80	6,047.8	153.4	606.2	11,695,219.38	2,116,629.56	32° 12' 34.604 N	103° 27' 35.502 W
6,200.0	10.00	75.80	6,146.3	157.7	623.1	11,695,223.88	2,116,646.33	32° 12' 34.646 N	103° 27' 35.306 W
6,300.0	10.00	75.80	6,244.8	161.9	639.9	11,695,228.38	2,116,663.10	32° 12' 34.688 N	103° 27' 35.110 W
6,400.0	10.00	75.80	6,343.3	166.2	656.7	11,695,232.88	2,116,679.87	32° 12' 34.730 N	103° 27' 34.914 W
6,500.0	10.00	75.80	6,441.8	170.4	673.6	11,695,237.38	2,116,696.64	32° 12' 34.772 N	103° 27' 34.718 W
6,600.0	10.00	75.80	6,540.2	174.7	690.4	11,695,241.88	2,116,713.41	32° 12' 34.814 N	103° 27' 34.522 W

Centennial Resource Dev

Survey Report - Geographic

Company:	NEW MEXICO	**Local Co-ordinate Reference:**	Well JULIET FEDERAL COM 504H
Project:	LEA	**TVD Reference:**	RKB=3533.3+25 @ 3558.3usft
Site:	JULIET FEDERAL COM	**MD Reference:**	RKB=3533.3+25 @ 3558.3usft
Well:	JULIET FEDERAL COM 504H	**North Reference:**	True
Wellbore:	JULIET FEDERAL COM 504H	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP0	**Database:**	Compass

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,700.0	10.00	75.80	6,638.7	179.0	707.3	11,695,246.38	2,116,730.19	32° 12' 34.857 N	103° 27' 34.326 W
6,800.0	10.00	75.80	6,737.2	183.2	724.1	11,695,250.88	2,116,746.96	32° 12' 34.899 N	103° 27' 34.130 W
6,900.0	10.00	75.80	6,835.7	187.5	740.9	11,695,255.38	2,116,763.73	32° 12' 34.941 N	103° 27' 33.934 W
7,000.0	10.00	75.80	6,934.2	191.7	757.8	11,695,259.88	2,116,780.50	32° 12' 34.983 N	103° 27' 33.738 W
7,100.0	10.00	75.80	7,032.6	196.0	774.6	11,695,264.38	2,116,797.27	32° 12' 35.025 N	103° 27' 33.542 W
7,200.0	10.00	75.80	7,131.1	200.3	791.4	11,695,268.88	2,116,814.04	32° 12' 35.067 N	103° 27' 33.346 W
7,300.0	10.00	75.80	7,229.6	204.5	808.3	11,695,273.38	2,116,830.82	32° 12' 35.110 N	103° 27' 33.150 W
7,400.0	10.00	75.80	7,328.1	208.8	825.1	11,695,277.88	2,116,847.59	32° 12' 35.152 N	103° 27' 32.954 W
7,500.0	10.00	75.80	7,426.6	213.0	841.9	11,695,282.38	2,116,864.36	32° 12' 35.194 N	103° 27' 32.758 W
7,600.0	10.00	75.80	7,525.0	217.3	858.8	11,695,286.88	2,116,881.13	32° 12' 35.236 N	103° 27' 32.562 W
7,700.0	10.00	75.80	7,623.5	221.6	875.6	11,695,291.38	2,116,897.90	32° 12' 35.278 N	103° 27' 32.366 W
7,800.0	10.00	75.80	7,722.0	225.8	892.4	11,695,295.88	2,116,914.67	32° 12' 35.320 N	103° 27' 32.170 W
7,900.0	10.00	75.80	7,820.5	230.1	909.3	11,695,300.38	2,116,931.44	32° 12' 35.362 N	103° 27' 31.975 W
8,000.0	10.00	75.80	7,919.0	234.3	926.1	11,695,304.88	2,116,948.22	32° 12' 35.405 N	103° 27' 31.779 W
8,100.0	10.00	75.80	8,017.5	238.6	942.9	11,695,309.38	2,116,964.99	32° 12' 35.447 N	103° 27' 31.583 W
8,200.0	10.00	75.80	8,115.9	242.9	959.8	11,695,313.88	2,116,981.76	32° 12' 35.489 N	103° 27' 31.387 W
8,300.0	10.00	75.80	8,214.4	247.1	976.6	11,695,318.38	2,116,998.53	32° 12' 35.531 N	103° 27' 31.191 W
8,400.0	10.00	75.80	8,312.9	251.4	993.4	11,695,322.88	2,117,015.30	32° 12' 35.573 N	103° 27' 30.995 W
8,500.0	10.00	75.80	8,411.4	255.6	1,010.3	11,695,327.38	2,117,032.07	32° 12' 35.615 N	103° 27' 30.799 W
8,600.0	10.00	75.80	8,509.9	259.9	1,027.1	11,695,331.88	2,117,048.85	32° 12' 35.658 N	103° 27' 30.603 W
8,700.0	10.00	75.80	8,608.3	264.2	1,043.9	11,695,336.38	2,117,065.62	32° 12' 35.700 N	103° 27' 30.407 W
8,800.0	10.00	75.80	8,706.8	268.4	1,060.8	11,695,340.88	2,117,082.39	32° 12' 35.742 N	103° 27' 30.211 W
8,900.0	10.00	75.80	8,805.3	272.7	1,077.6	11,695,345.38	2,117,099.16	32° 12' 35.784 N	103° 27' 30.015 W
8,987.0	10.00	75.80	8,891.0	276.4	1,092.3	11,695,349.30	2,117,113.75	32° 12' 35.821 N	103° 27' 29.844 W
9,000.0	9.87	75.80	8,903.8	276.9	1,094.4	11,695,349.88	2,117,115.92	32° 12' 35.826 N	103° 27' 29.819 W
9,100.0	8.87	75.80	9,002.4	280.9	1,110.2	11,695,354.10	2,117,131.64	32° 12' 35.866 N	103° 27' 29.635 W
9,200.0	7.87	75.80	9,101.4	284.5	1,124.3	11,695,357.87	2,117,145.70	32° 12' 35.901 N	103° 27' 29.471 W
9,300.0	6.87	75.80	9,200.6	287.6	1,136.8	11,695,361.20	2,117,158.09	32° 12' 35.932 N	103° 27' 29.326 W
9,400.0	5.87	75.80	9,299.9	290.4	1,147.5	11,695,364.07	2,117,168.81	32° 12' 35.959 N	103° 27' 29.201 W
9,500.0	4.87	75.80	9,399.5	292.7	1,156.6	11,695,366.50	2,117,177.84	32° 12' 35.982 N	103° 27' 29.096 W
9,600.0	3.87	75.80	9,499.2	294.5	1,164.0	11,695,368.47	2,117,185.20	32° 12' 36.000 N	103° 27' 29.010 W
9,700.0	2.87	75.80	9,599.0	296.0	1,169.7	11,695,369.99	2,117,190.88	32° 12' 36.014 N	103° 27' 28.943 W
9,800.0	1.87	75.80	9,698.9	297.0	1,173.7	11,695,371.07	2,117,194.88	32° 12' 36.025 N	103° 27' 28.897 W
9,900.0	0.87	75.80	9,798.9	297.6	1,176.0	11,695,371.69	2,117,197.18	32° 12' 36.030 N	103° 27' 28.870 W
9,987.0	0.00	0.00	9,885.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,000.0	0.00	0.00	9,898.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,100.0	0.00	0.00	9,998.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,200.0	0.00	0.00	10,098.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,300.0	0.00	0.00	10,198.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,400.0	0.00	0.00	10,298.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,500.0	0.00	0.00	10,398.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,600.0	0.00	0.00	10,498.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,700.0	0.00	0.00	10,598.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,778.0	0.00	0.00	10,676.9	297.7	1,176.6	11,695,371.86	2,117,197.82	32° 12' 36.032 N	103° 27' 28.862 W
10,800.0	2.20	180.88	10,698.9	297.3	1,176.6	11,695,371.43	2,117,197.82	32° 12' 36.028 N	103° 27' 28.862 W
10,900.0	12.20	180.88	10,798.0	284.8	1,176.4	11,695,358.92	2,117,197.81	32° 12' 35.904 N	103° 27' 28.864 W
11,000.0	22.19	180.88	10,893.4	255.3	1,176.0	11,695,329.39	2,117,197.78	32° 12' 35.612 N	103° 27' 28.870 W
11,100.0	32.19	180.88	10,982.2	209.6	1,175.3	11,695,283.75	2,117,197.73	32° 12' 35.160 N	103° 27' 28.878 W
11,200.0	42.19	180.88	11,061.8	149.3	1,174.4	11,695,223.38	2,117,197.67	32° 12' 34.563 N	103° 27' 28.889 W
11,300.0	52.19	180.88	11,129.7	76.0	1,173.2	11,695,150.11	2,117,197.59	32° 12' 33.838 N	103° 27' 28.902 W
11,400.0	62.19	180.88	11,183.8	-7.9	1,171.9	11,695,066.18	2,117,197.50	32° 12' 33.007 N	103° 27' 28.917 W
11,500.0	72.18	180.88	11,222.5	-100.0	1,170.5	11,694,974.12	2,117,197.41	32° 12' 32.096 N	103° 27' 28.933 W
11,600.0	82.18	180.88	11,244.7	-197.3	1,169.0	11,694,876.73	2,117,197.30	32° 12' 31.133 N	103° 27' 28.951 W
11,678.2	90.00	180.88	11,250.0	-275.3	1,167.8	11,694,798.76	2,117,197.22	32° 12' 30.361 N	103° 27' 28.965 W
11,700.0	90.00	180.87	11,250.0	-297.1	1,167.5	11,694,776.98	2,117,197.20	32° 12' 30.145 N	103° 27' 28.969 W

Centennial Resource Dev

Survey Report - Geographic

Company:	NEW MEXICO	**Local Co-ordinate Reference:**	Well JULIET FEDERAL COM 504H
Project:	LEA	**TVD Reference:**	RKB=3533.3+25 @ 3558.3usft
Site:	JULIET FEDERAL COM	**MD Reference:**	RKB=3533.3+25 @ 3558.3usft
Well:	JULIET FEDERAL COM 504H	**North Reference:**	True
Wellbore:	JULIET FEDERAL COM 504H	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP0	**Database:**	Compass

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,800.0	90.00	180.80	11,250.0	-397.1	1,166.0	11,694,676.98	2,117,197.18	32° 12' 29.156 N	103° 27' 28.986 W
11,900.0	90.00	180.74	11,250.0	-497.1	1,164.7	11,694,576.98	2,117,197.26	32° 12' 28.166 N	103° 27' 29.001 W
12,000.0	90.00	180.68	11,250.0	-597.0	1,163.5	11,694,476.98	2,117,197.45	32° 12' 27.177 N	103° 27' 29.016 W
12,100.0	90.00	180.62	11,250.0	-697.0	1,162.3	11,694,376.98	2,117,197.76	32° 12' 26.187 N	103° 27' 29.029 W
12,200.0	90.00	180.55	11,250.0	-797.0	1,161.3	11,694,276.98	2,117,198.17	32° 12' 25.197 N	103° 27' 29.041 W
12,300.0	90.00	180.49	11,250.0	-897.0	1,160.4	11,694,176.98	2,117,198.69	32° 12' 24.208 N	103° 27' 29.052 W
12,400.0	90.00	180.43	11,250.0	-997.0	1,159.6	11,694,076.98	2,117,199.32	32° 12' 23.218 N	103° 27' 29.061 W
12,500.0	90.00	180.36	11,250.0	-1,097.0	1,158.9	11,693,976.98	2,117,200.06	32° 12' 22.229 N	103° 27' 29.069 W
12,600.0	90.00	180.30	11,250.0	-1,197.0	1,158.3	11,693,876.99	2,117,200.91	32° 12' 21.239 N	103° 27' 29.076 W
12,700.0	90.00	180.24	11,250.0	-1,297.0	1,157.9	11,693,776.99	2,117,201.87	32° 12' 20.249 N	103° 27' 29.081 W
12,800.0	90.00	180.18	11,250.0	-1,397.0	1,157.5	11,693,677.00	2,117,202.94	32° 12' 19.260 N	103° 27' 29.086 W
12,900.0	90.00	180.11	11,250.0	-1,497.0	1,157.2	11,693,577.01	2,117,204.12	32° 12' 18.270 N	103° 27' 29.089 W
13,000.0	90.00	180.05	11,250.0	-1,597.0	1,157.1	11,693,477.01	2,117,205.41	32° 12' 17.280 N	103° 27' 29.090 W
13,100.0	90.00	179.99	11,250.0	-1,697.0	1,157.1	11,693,377.02	2,117,206.80	32° 12' 16.291 N	103° 27' 29.091 W
13,200.0	90.00	179.93	11,250.0	-1,797.0	1,157.1	11,693,277.03	2,117,208.31	32° 12' 15.301 N	103° 27' 29.090 W
13,300.0	90.00	179.86	11,250.0	-1,897.0	1,157.3	11,693,177.05	2,117,209.93	32° 12' 14.311 N	103° 27' 29.088 W
13,400.0	90.00	179.80	11,250.0	-1,997.0	1,157.6	11,693,077.06	2,117,211.65	32° 12' 13.322 N	103° 27' 29.084 W
13,500.0	90.00	179.74	11,250.0	-2,097.0	1,158.0	11,692,977.08	2,117,213.49	32° 12' 12.332 N	103° 27' 29.080 W
13,520.5	90.00	179.72	11,250.0	-2,117.5	1,158.1	11,692,956.60	2,117,213.88	32° 12' 12.129 N	103° 27' 29.079 W
13,600.0	90.00	179.72	11,250.0	-2,197.0	1,158.5	11,692,877.10	2,117,215.40	32° 12' 11.342 N	103° 27' 29.074 W
13,700.0	90.00	179.72	11,250.0	-2,297.0	1,159.0	11,692,777.12	2,117,217.31	32° 12' 10.353 N	103° 27' 29.069 W
13,800.0	90.00	179.72	11,250.0	-2,397.0	1,159.5	11,692,677.13	2,117,219.22	32° 12' 9.363 N	103° 27' 29.063 W
13,900.0	90.00	179.72	11,250.0	-2,497.0	1,159.9	11,692,577.15	2,117,221.13	32° 12' 8.373 N	103° 27' 29.057 W
14,000.0	90.00	179.72	11,250.0	-2,597.0	1,160.4	11,692,477.17	2,117,223.05	32° 12' 7.384 N	103° 27' 29.052 W
14,100.0	90.00	179.72	11,250.0	-2,697.0	1,160.9	11,692,377.19	2,117,224.96	32° 12' 6.394 N	103° 27' 29.046 W
14,200.0	90.00	179.72	11,250.0	-2,797.0	1,161.4	11,692,277.21	2,117,226.87	32° 12' 5.405 N	103° 27' 29.041 W
14,300.0	90.00	179.72	11,250.0	-2,897.0	1,161.9	11,692,177.23	2,117,228.78	32° 12' 4.415 N	103° 27' 29.035 W
14,400.0	90.00	179.72	11,250.0	-2,997.0	1,162.4	11,692,077.24	2,117,230.70	32° 12' 3.425 N	103° 27' 29.030 W
14,500.0	90.00	179.72	11,250.0	-3,097.0	1,162.8	11,691,977.26	2,117,232.61	32° 12' 2.436 N	103° 27' 29.024 W
14,600.0	90.00	179.72	11,250.0	-3,197.0	1,163.3	11,691,877.28	2,117,234.52	32° 12' 1.446 N	103° 27' 29.019 W
14,700.0	90.00	179.72	11,250.0	-3,297.0	1,163.8	11,691,777.30	2,117,236.43	32° 12' 0.456 N	103° 27' 29.013 W
14,800.0	90.00	179.72	11,250.0	-3,397.0	1,164.3	11,691,677.32	2,117,238.35	32° 11' 59.467 N	103° 27' 29.007 W
14,900.0	90.00	179.72	11,250.0	-3,497.0	1,164.8	11,691,577.34	2,117,240.26	32° 11' 58.477 N	103° 27' 29.002 W
15,000.0	90.00	179.72	11,250.0	-3,597.0	1,165.2	11,691,477.35	2,117,242.17	32° 11' 57.487 N	103° 27' 28.996 W
15,100.0	90.00	179.72	11,250.0	-3,697.0	1,165.7	11,691,377.37	2,117,244.08	32° 11' 56.498 N	103° 27' 28.991 W
15,200.0	90.00	179.72	11,250.0	-3,797.0	1,166.2	11,691,277.39	2,117,246.00	32° 11' 55.508 N	103° 27' 28.985 W
15,300.0	90.00	179.72	11,250.0	-3,897.0	1,166.7	11,691,177.41	2,117,247.91	32° 11' 54.518 N	103° 27' 28.980 W
15,400.0	90.00	179.72	11,250.0	-3,997.0	1,167.2	11,691,077.43	2,117,249.82	32° 11' 53.529 N	103° 27' 28.974 W
15,500.0	90.00	179.72	11,250.0	-4,097.0	1,167.6	11,690,977.45	2,117,251.73	32° 11' 52.539 N	103° 27' 28.968 W
15,600.0	90.00	179.72	11,250.0	-4,197.0	1,168.1	11,690,877.46	2,117,253.65	32° 11' 51.549 N	103° 27' 28.963 W
15,700.0	90.00	179.72	11,250.0	-4,297.0	1,168.6	11,690,777.48	2,117,255.56	32° 11' 50.560 N	103° 27' 28.957 W
15,800.0	90.00	179.72	11,250.0	-4,397.0	1,169.1	11,690,677.50	2,117,257.47	32° 11' 49.570 N	103° 27' 28.952 W
15,900.0	90.00	179.72	11,250.0	-4,497.0	1,169.6	11,690,577.52	2,117,259.38	32° 11' 48.581 N	103° 27' 28.946 W
16,000.0	90.00	179.72	11,250.0	-4,597.0	1,170.1	11,690,477.54	2,117,261.30	32° 11' 47.591 N	103° 27' 28.941 W
16,100.0	90.00	179.72	11,250.0	-4,697.0	1,170.5	11,690,377.56	2,117,263.21	32° 11' 46.601 N	103° 27' 28.935 W
16,200.0	90.00	179.72	11,250.0	-4,797.0	1,171.0	11,690,277.57	2,117,265.12	32° 11' 45.612 N	103° 27' 28.929 W
16,300.0	90.00	179.72	11,250.0	-4,897.0	1,171.5	11,690,177.59	2,117,267.03	32° 11' 44.622 N	103° 27' 28.924 W
16,400.0	90.00	179.72	11,250.0	-4,997.0	1,172.0	11,690,077.61	2,117,268.95	32° 11' 43.632 N	103° 27' 28.918 W
16,500.0	90.00	179.72	11,250.0	-5,097.0	1,172.5	11,689,977.63	2,117,270.86	32° 11' 42.643 N	103° 27' 28.913 W
16,600.0	90.00	179.72	11,250.0	-5,197.0	1,172.9	11,689,877.65	2,117,272.77	32° 11' 41.653 N	103° 27' 28.907 W
16,700.0	90.00	179.72	11,250.0	-5,297.0	1,173.4	11,689,777.66	2,117,274.68	32° 11' 40.663 N	103° 27' 28.902 W
16,800.0	90.00	179.72	11,250.0	-5,397.0	1,173.9	11,689,677.68	2,117,276.60	32° 11' 39.674 N	103° 27' 28.896 W
16,900.0	90.00	179.72	11,250.0	-5,497.0	1,174.4	11,689,577.70	2,117,278.51	32° 11' 38.684 N	103° 27' 28.890 W
17,000.0	90.00	179.72	11,250.0	-5,597.0	1,174.9	11,689,477.72	2,117,280.42	32° 11' 37.694 N	103° 27' 28.885 W
17,100.0	90.00	179.72	11,250.0	-5,697.0	1,175.3	11,689,377.74	2,117,282.33	32° 11' 36.705 N	103° 27' 28.879 W

Centennial Resource Dev

Survey Report - Geographic

Company:	NEW MEXICO	**Local Co-ordinate Reference:**	Well JULIET FEDERAL COM 504H
Project:	LEA	**TVD Reference:**	RKB=3533.3+25 @ 3558.3usft
Site:	JULIET FEDERAL COM	**MD Reference:**	RKB=3533.3+25 @ 3558.3usft
Well:	JULIET FEDERAL COM 504H	**North Reference:**	True
Wellbore:	JULIET FEDERAL COM 504H	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP0	**Database:**	Compass

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
17,200.0	90.00	179.72	11,250.0	-5,797.0	1,175.8	11,689,277.76	2,117,284.25	32° 11' 35.715 N	103° 27' 28.874 W
17,300.0	90.00	179.72	11,250.0	-5,897.0	1,176.3	11,689,177.77	2,117,286.16	32° 11' 34.725 N	103° 27' 28.868 W
17,400.0	90.00	179.72	11,250.0	-5,997.0	1,176.8	11,689,077.79	2,117,288.07	32° 11' 33.736 N	103° 27' 28.863 W
17,500.0	90.00	179.72	11,250.0	-6,097.0	1,177.3	11,688,977.81	2,117,289.98	32° 11' 32.746 N	103° 27' 28.857 W
17,600.0	90.00	179.72	11,250.0	-6,197.0	1,177.8	11,688,877.83	2,117,291.90	32° 11' 31.757 N	103° 27' 28.851 W
17,700.0	90.00	179.72	11,250.0	-6,297.0	1,178.2	11,688,777.85	2,117,293.81	32° 11' 30.767 N	103° 27' 28.846 W
17,800.0	90.00	179.72	11,250.0	-6,397.0	1,178.7	11,688,677.87	2,117,295.72	32° 11' 29.777 N	103° 27' 28.840 W
17,900.0	90.00	179.72	11,250.0	-6,497.0	1,179.2	11,688,577.88	2,117,297.63	32° 11' 28.788 N	103° 27' 28.835 W
18,000.0	90.00	179.72	11,250.0	-6,597.0	1,179.7	11,688,477.90	2,117,299.55	32° 11' 27.798 N	103° 27' 28.829 W
18,100.0	90.00	179.72	11,250.0	-6,697.0	1,180.2	11,688,377.92	2,117,301.46	32° 11' 26.808 N	103° 27' 28.824 W
18,200.0	90.00	179.72	11,250.0	-6,797.0	1,180.6	11,688,277.94	2,117,303.37	32° 11' 25.819 N	103° 27' 28.818 W
18,300.0	90.00	179.72	11,250.0	-6,897.0	1,181.1	11,688,177.96	2,117,305.28	32° 11' 24.829 N	103° 27' 28.812 W
18,400.0	90.00	179.72	11,250.0	-6,997.0	1,181.6	11,688,077.98	2,117,307.19	32° 11' 23.839 N	103° 27' 28.807 W
18,500.0	90.00	179.72	11,250.0	-7,097.0	1,182.1	11,687,977.99	2,117,309.11	32° 11' 22.850 N	103° 27' 28.801 W
18,600.0	90.00	179.72	11,250.0	-7,197.0	1,182.6	11,687,878.01	2,117,311.02	32° 11' 21.860 N	103° 27' 28.796 W
18,700.0	90.00	179.72	11,250.0	-7,297.0	1,183.0	11,687,778.03	2,117,312.93	32° 11' 20.870 N	103° 27' 28.790 W
18,800.0	90.00	179.72	11,250.0	-7,397.0	1,183.5	11,687,678.05	2,117,314.84	32° 11' 19.881 N	103° 27' 28.785 W
18,827.3	90.00	179.72	11,250.0	-7,424.3	1,183.7	11,687,650.73	2,117,315.37	32° 11' 19.610 N	103° 27' 28.783 W

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
FTP - JULIET FED COM - plan misses target center by 238.3usft at 11218.3usft MD (11075.2 TVD, 136.8 N, 1174.2 E) - Circle (radius 50.0)	0.00	0.00	11,250.0	298.7	1,176.3	11,695,372.78	2,117,197.48	32° 12' 36.041 N	103° 27' 28.866 W
LTP/BHL - JULIET FED - plan hits target center - Point	0.00	0.00	11,250.0	-7,424.3	1,183.7	11,687,650.73	2,117,315.37	32° 11' 19.610 N	103° 27' 28.783 W

Checked By: _____ Approved By: _____ Date: _____

NEW MEXICO

LEA
JULIET FEDERAL COM
JULIET FEDERAL COM 503H

JULIET FEDERAL COM 503H
PWP0

Anticollision Summary Report

11 November, 2019

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**CENTENNIAL RESOURCE PRODUCTION**
LEASE NO.:	**NMNM077090**
WELL NAME & NO.:	**JULIET FEDERAL COM 504H**
SURFACE HOLE FOOTAGE:	**400'/N & 1413'/W**
BOTTOM HOLE FOOTAGE	**2548'/N & 2590'/W**
LOCATION:	**Section 22, T.24 S., R.34 E., NMPM**
COUNTY:	**Lea County, New Mexico**

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

All previous COAs still apply, except for the following:

A. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1,350** feet (a minimum of **25 feet (Lea County)** 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 will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    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.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

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 cave/karst or potash.**

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

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

B. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

C. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

JJP12152019

GENERAL 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

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

1. 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.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).

b. When the operator proposes to set surface casing with Spudder Rig
   - Notify the BLM when moving in and removing the Spudder Rig.
   - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
   - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. 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 are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) 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.

A. CASING

1. 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.

2. 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. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. 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. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. 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.

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

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. 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.
8. 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 RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher 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. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. 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. 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, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. 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 (8 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).

d. 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.

e. The results of the test shall be reported to the appropriate BLM office.

f. 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.

g. 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.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. 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.