Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR FIELD OFFICE BUREAU OF LAND MANAGEMENT OF THE INTERIOR OF THE INTERIO

SUNDRY NOTICES AND REPORTS ON WELOS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 201

5. Lease Serial No. NMNM15291

	CLIMINIMI	291		
6.	If Indian, A	llottee or	Tribe	Name

1. Type of Well	abandoned we	ii. Use form 3160-3 (API	—————	J3aI3.		,		
BY OIL Well _ Gas Well _ Other	SUBMIT IN	TRIPLICATE - Other inst	tructions on page	2	į	7. If Unit or CA/Agreer	ment, N	ame and/or No.
PERCUSSION PETROLEUM OPERABNGIS SCHAPMANGSPUREPLIC.CCM 30-015-46012-00-x1 31-015-24012-00-x1 30-015-46012-00-x1 30-015-460	· ·					8. Well Name and No. DORAMI 33 FED 0	COM 4	1
919 MILAM STREET, SUITE 2475 HOUSTON, TX 77002 4. Location of Well (Foosage, Size, T. R. M., or Survey Description) 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION 13. Notice of Intent 14. Acidize 15. Describe Proposed or Completed Operation: Clearly state all pertinent details, aciding exhanted starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, pies souther School and the size is ready for final inspection. 15. Describe Proposed or Completed Operation: Clearly state all pertinent details, aciding exhanted starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, pies submission and the size is ready for final inspection. 15. Describe Proposed or Completed Operation: Clearly state all pertinent details, aciding exhanted starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, pies submission and starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, pies submission and the size is ready for final inspection. 15. Describe Proposed or Completed Operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 316-04 must be filed once testing has been completed in the size is ready for final inspection. 15. Describe Proposed or Completed Proposed or Proposed Operations or Proposed Operation or recompleted and the	Name of Operator PERCUSSION PETROLEUM	Contact: OPERA THN/G il: SCHAPMA	SARAH E CHAP AN@SPUREPLLC.C	MAN OM		9. API Well No. 20-015-46012-00	D-X1	
Sec 34 T198 R25E NWSW 1910FSL 860FWL 2. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF SUBMISSION TYPE OF ACTION Actidize	919 MILAM STREET, SUITE	919 MILAM STREET, SUITE 2475 Ph: 832				10. Field and Pool or E. N SEVEN RIVER	xplorato	ory Area OR-YESO
12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION Acidize		., R., M., or Survey Description)			11. County or Parish, S	tate	***
TYPE OF SUBMISSION Acidize						EDDY COUNTY,	, NM	
Notice of Intent	12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICATE N	ATURE OF	F NOTICE, F	REPORT, OR OTH	ER D	ATA
Subsequent Report	TYPE OF SUBMISSION			TYPE OF	ACTION			-
Subsequent Report	Nation of Intent	☐ Acidize	□ Deepen		☐ Production	on (Start/Resume)	o W	ater Shut-Off
Subsequent Report	Notice of Intent	☐ Alter Casing	☐ Hydraulie	Fracturing	☐ Reclamat	ion	o w	ell Integrity
Clarification Plug Back	☐ Subsequent Report	Casing Repair	■ New Con	struction	☐ Recomple	ete	Ø O	ther
Convert to Injection	☐ Final Abandonment Notice	☐ Change Plans	Plug and	Abandon	☐ Temporar	rily Abandon		
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 vitin 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 Abandomment 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. Spur Energy Partners LLC respectfully requests to amend the approved casing and cementing design attached for the following well: 30-015-46012 Dorami 33 Federal Com 4H - NMNM015291 Please find updated C-102, Supplemental, Directional Plan, Plot and Drill Plan for your use. Thank you. Brill Changed Work: 1837 FSU DISTRICTIVARTIESIAO.CD Aparous File Districtivartiesiao.CD Thank you. Brill Changed Work of the supplemental that the foregoing is true and correct. Electronic Submission #494228 verified by the BLM Well Information System For PERCUSSION PETROLEUM OPERATING, sent to the Carlabad Committed to AFMSS for processing by PRISCILLA PEREZ on 120/42/019 (20P0565SE) Name (Printed/Typed) SARAH E CHAPMAN Title REGULATORY DIRECTOR This SPACE FOR FEDERAL OR STATE OFFICE USE TitlePETROLEUM ENGINEER Date 12/12/20 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. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any persorl knowingly and willfully to make to any department or agency of the United		☐ Convert to Injection	☐ Plug Bac			sposal		
Title PETROLEUM ENGINEER Approved By DYLAN ROSSMANGO Approval of this notice does not warrant or certify that the applicant to conduct operations thereon. Approved By USC. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any persont knowingly and willfully to make to any department or agency of the United Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any persont knowingly and willfully to make to any department or agency of the United Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any persont knowingly and willfully to make to any department or agency of the United	casing and cementing design 30-015-46012 Dorami 33 Fed Please find updated C-102, S	attached for the following eral Com 4H - NMNM015 upplemental, Directional I	ywell: 5291 Plan, Plot and Drill	Plan for you	ur use.	JΑ		
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DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone: (375) 393-6161 Fax: (575) 393-0720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone: (375) 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 6 2020

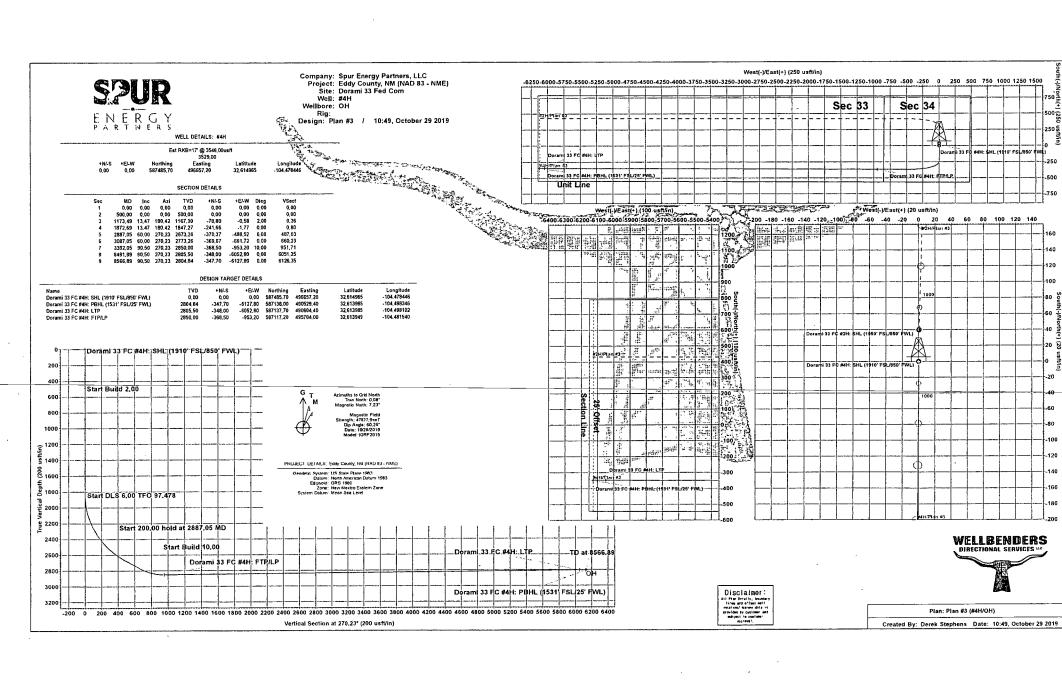
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

1220 South St. Francis DSTRICTI-ARTESIAO.C.D. Santa Fe, New Mexico 87505

MAMENDED REPORT

Phone: (50.	o) 476-3460 F	ax: (505) 476-3		LL LOCA	TION A	ND ACRE	AG	E DEDICA	ATIC	N PLA	T	
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Dedica	ated Acres	Joint or	Infill	Consolidation Co	ode Ord	er No.						
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				-								KZ 06/29/201



DRILLING PROGRAM

CASING DEPTHS:

9-5/8" 32# J-55 LT&C set at

1.250' inside

12 1/4 open hole, cemented to surface

.

5 1/2" 17# L-80 BT&C set at

8,567' inside

inside

8 3/4 open hole, cemented to surface

7" 32# L-80 BT&C set at

3,090'

8 3/4

open hole, cemented to surface

POTENTIAL PROBLEMS: 0' - 1250'

Gravel, Red Beds and Water Sands. Seepage and losses. Tight hole.

1250' - TD

Hole cleaning, seepage, and loses.

MUD PROGRAM:

<u>Interval</u>	Mud Type	Mud Weight	Viscosity	Water Loss	Plastic Viscosity	<u>Yield Point</u>
0' - 1250'	FW / Gel Paper and gel swee	8.4 - 9.2 PPG eps to clean hole	36 - 42	NC	3 - 5	5 - 7
1250' - KOP		8.3 - 9.2 PPG lean hole and LCN	28 - 30 Il pills for loss	NC circulation, Rais	l se vis to 34 - 40 if ne	l eded.
KOP - TD	surface casing. I Drill curve and la Drill as close to		- 40 if needed XCD Polymer ced as possib	. If drag becom / Cut Brine / St ble.	4 - 5 Only acid soluble LC es a problem add Su arch system.	
		to be coordinated s only a guide an nd changes.	•	•		

ESTIMAT	ED EORMA	TION TOP:	S / LITHOLOG	V٠

3,529' Ground Level

17' RKB

<u>Formation</u>	MD	TVD	<u>ss</u>	Lithology
Grayburg		659'	2,870'	Dolomite
San Andes		844'	2,685'	Dolomite
Glorieta		2,404'	1,125'	Silty Dolomite
Yeso		2,559'	970'	Dolomite
Mid Yeso Mkr		2,849'	680'	Dolomite

DRILL STEM TEST:

None

MUD LOGGING:

A one man mud logging unit will be in service prior to spudding well to total depth. Samples in the lateral/pay will be taken every 10'. Mud logger will assist in picking surface casing point. Only authorized personnel will be allowed access to mud logging unit. Mud logger will be in contact with C.J. Lipinski. EOL at 25' FWL is a hard line. Cut short to 45' FWL to avoid crossing hard line. Do not exceed without approval from John Nabors Operations Manager. Drilling Foreman is to be notified of changes in drilling parameters.

ELECTRIC LINE LOGS

None

DIRECTIONAL SURVEYS Straight hole specifications. Maximum deviation from vertical shall be no more than 3° inclination.

We will directionally drill according to the well plan in order to hit our intended landing zone. We will drill as per directional plan to ~100 ft from lease line enabling us to locate our FTP 100' FEL We will run 5 1/2" x 7" casing with 2 jt shoe track to TD and cement in place. Our LTP will be 100' FWL. See directional plan for more details.

THIS IS A HORIZONTAL WELL WITH EXTREMELY TIGHT TOLERANCES. KEEP LELAN ANDERS AND CJ LIPINSKI INFORMED WITH ANY PROBLEMS MAINTAINING TARGET.

Straight Hole Specifications

Well Depth Feet	Maximum Distance Between Surveys		Maximum Deviation From Vertical
0' - 100'			3°
100' - 2,000'	MWD and Motor thru this section	of hole. *	10°
2,000' - TD	MWD and Motor thru this section	of hole.	
* Depending on d	lirectional plan. If vertical hole is used to 1800' MD	(surface of	casing point) then
minimum distance	between surverys will be 250' MD 3° max deviation fro	m vertical	

WELLHEAD EQUIP:

9-5/8" Casing 9-5/8" 3M x 11" 3M SOW

7" Casing

11" 5M x 7-1/16" 10M Tubing Head

CASING DESIGN:

9-5/8" CASING

9-5/8" Shoe	Casing Burst:	3,520 psi
1 Jt 9-5/8" 36# J-55 STC	Casing Collapse:	2,020 psi
9-5/8" Insert Float	Casing Tensile:	394,000 lbs
0 5/8" 26# 1 55 STC To Surface		

CASING SAFETY FACTORS

	API Recommended Safety Factor	Actual Safety Factor	Scenario	External Fluids	Internal Fluids
Collapse:	1.125	3.30	Lost Circulation	Mud	None
Burst:	1.125	1.46	Plug Bump	Cement + 2000 psi applied pressure	Mud/Water
Tensile:	1.8	2.80	100k Overpull	Mud	Mud

CENTRALIZER PLACEMENT

Stop collar 10 feet above shoe with centralizer. One on first collar and every forth collar to surface, or as required by the BLM.

7" x 5 1/2" CASING

		5-1/2"	1"
5 1/2" Shoe	Casing Burst:	8,990 psi	9,060 psi
2 Jts 5 1/2" 17# L80 BTC	Casing Collapse:	8,830 psi	8,600 psi
5 1/2" Float Collar	Casing Tensile:	466,000 lbs	745,000 lbs
5 1/2" 20# L80 BTC Casing To 3090'			
7" 32# L80 BTC Casing to surface			•

CASING SAFETY FACTORS

	Safety Factor	Safety Factor	Scenario	External Fluids	Internal Fluids
Collapse:	1,125	3.75	Lost Circulation	Mud	None
Burst:	1.125	2.47	Plug Bump	Cement + 2000 psi applied pressure	Mud/Water
Tensile:	1.8	2.29	100k Overpull	Mud	Mud
OFFITOAL ITEO	DI ACCRECATE			'	

CENTRALIZER PLACEMENT

Stop collar 10 feet above shoe with centralizer. One on first collar and every 10 collars to 1200 feet with one centralizer in 9-5/8" casing, or as required by the BLM.

REQUIREMENTS FOR ALL CASING:

Long string casing to be hydro tested before leaving yard.

Thread lock Float Shoe and joint connection between float equipment.

Unload and visually inspect casing, arranging on racks in order of running.

Strap all casing as it is unloaded, threads off. Count all joints on location

Clean and inspect threads, drift, redope.

Check all casing markings and threads for correctness.

Check crossovers and crossover collars. Have back up collars.

Rope off and mark all casing not to be used.

PPO representative to supervise all casing operations.

Torque casing to optimal value.

CEMENT SCHEDULE:

9-5/8" CASING

Annular Volume:

391.5

Lead Cement:

622.8 sks

Class "C" + 2% CaCl + 0.25 pps Celloflake

Weight 14.8 ppg, Yield 1.32 cfs, Mix Water 6.3 gps.

These volumes based on circulating cement to surface plus 100% excess

If cement does not circulate 1 inch cement to surface.

7" x 5 1/2" CASING

Annular Volume:

cubic ft 1868,5

Lead Cement: 494.9 sks

65/65/6 Class "C"+ 6% gel + 5% salt + 0.25pps Celloflake + 0.2% C41-P

Weight 12.6 ppg, Yield 1.97 cfs, Mixing Water 10.84 gps Tail Cement:

1398.1 sks Class "C" + 2% CaCl + 0.25pps Celloflake

Weight 14.8 ppg, Yield 1.32 cfs, Mix Water 6.3 gps.

These volumes based on circulating cement to surface plus 50% excess

REQUIREMENTS FOR ALL CEMENT:

Have cement supervisor independently check cement volumes and displacement volumes.

Collect and identify cement sample from each pod.

Minimize out of hole time. Have cement head already installed on casing joint etc.

Run casing at a smooth even pace being certain not to break down well bore.

Plan for unexpected events, plug doesn't bump at target volume, pump or lift pressures off, etc.

Do not over pump displacement volume.

Ensure plug dropped behind good cement. Chase plug with 10 bbls of sugar water.

Weigh cement samples and take wet samples throughout job.

Run material balance at end of each job to ensure water and cement volumes used confirm was mixed at proper weight as designated.

DRILLING PROCEDURE

- Build road and location as per rig requirements. Install Conductor to 90 ft. (THIS IS A CLOSED LOOP MUD SYSTEM)
- 2 Notify BLM (Carlsbad District) of rig moving in and tentative spud date.
- Move in and rig up drill rig. Install valve in conductor pipe. Rig up closed loop system. 3
- Order float equipment, Texas Pattern Guide Shoe, centralizers, and 9-5/8" casing to location. Visually inspect casing and arrange on racks in order of running. Rope off and mark all casing not to be used. Count all joints. Strap casing as it is unloaded (THREADS OFF), Inspect casing and check all casing markings and threads for correctness. Inspect and clean threads, redope, and drift casing. Closely inspect any crossover joints and have back up crossover collars on location PPO supervisor to oversee all casing inspections, drifting, strapping, etc.
- 5. Drill 12-1/4" hole with fresh water Native Spud Mud to TD of surface hole interval. BHA 12-1/4" bit, bit sub, 12" OD stabilizer, 1-8" drill collar, 12" OD stabilizer, 6-8" drill collars and 9-6" drill collars. Directional surveys (inclination only on sand line) every 500' and at TD of surface hole.
- Notify BLM of TD and cement job.
- Pump 2 high vis sweeps and circulate hole clean run gyro survey every 200' prior to pulling out of hole.
- Pull out of hole and record any tight spots on IADC report. SLM out of hole. Make sure cement crew will be on location and rigged up before casing is on bottom prior to starting out of hole. Keep hole full.
- Rig up casing crew and run 9-5/8" casing per casing design. Fill casing every 5 joints and direulate one joint off bottom. Run centralizers per design or as required by BLM. Wash to bottom if necessary.
- Rig up cementers and test lines to 2000 psi. Have cement supervisor INDEPENDENTLY check cement volumes and 10 displacement volumes. Collect and identify cement sample from each pod. Minimize out of hole time.
- 11. Circulate casing for 3 casing volumes minimum or until hole cleans up. While circulating hold final job meeting with cement company going over cement volumes, mixing water requirements, displacement volumes, pump pressure and rates, and contingency plans for unexpected events (i.e. plug does not bump at theoretical displacement volume etc.). Add 100% excess to calculated cement volume required. Don't over displace. Top out cement to surface with 1" tubing IF necessary.
- 12. Pump 20 barrels fresh water spacer ahead and pump cement volume per cement design for 9-5/8" casing and PPO representative. Bump plug to 500 psi over pump pressure. Drop plug in good cement. Record cement to surface on IADC report.
- 13. Hang casing in full tension. Close cement head for 8 hours.

- 14. WOC 8 hours before cutting off and 24 hours before drilling out per BLM rules.
- 15. Cut off casing and install 9-5/8" 3M x 11" 3M SOW A-section.
- Nipple up BOP and test to 500 psi low and 3000 psi high with an independent test company before drilling out.
- 17. Pick up 8-3/4" bit, and directional drilling BHA. Trip in hole, tag cement and record on IADC report. Test easing to 1000 psi.

 Drill out float collar and float shoe with fresh water / cut brine 8.3 9.2 ppg to a depth Increase mud vis to 30-34 for hole cleaning and samples if needed. Mud program is a guide and hole conditions will dictate mud system requirements or changes. All mud additions will be coordinated through PPO representative.
- 18. Order float equipment, guide shoe, centralizers, 7" and 5 1/2" casing to location. Check for proper size, type, and thread of casing. Visually inspect casing and arrange on racks in order of running. Rope off and mark all casing not to be used. Count all joints.

 Strap casing as it is unloaded (THREADS OFF). Inspect casing and check all casing markings and threads for correctness. Inspect and clean threads, redope, and drift casing. Closely inspect any crossover joints and have back up crossover collars on location. PPO supervisor to oversee all casing inspections, drifting, strapping, etc. Casing to be hydro tested before leaving yard. Make sure there are a minimum of 2 marker joints in the string (on at KOP and one mid way through planned lateral).
- 19. Drill curve and lateral section with XCD Polymer / Cut Brine / Starch System. Increase viscosity as needed using oil and LF-24 to help keep hole slick to TMD if needed. Mud program is a guide and hole conditions will dictate mud system requirements or changes. All mud additions will be coordinated through PPO representative. Drilling breaks and hole problems will be coordinated with drilling foreman, Operations Manager and Engineer. Artesia and Houston offices will be advised daily or as needed.
- 20. Notify BLM of TD and cement job.
- 21. Pump high vis sweep and circulate hole clean.
- Pull out of hole and record any tight spots on IADC report. SLM out of hole. Make sure cement crew will be on location
 and rigged up before casing is on bottom prior to starting out of hole. Keep hole full.
- 23. Rig up casing crew and run 7" x 5 1/2" casing per casing design. Fill casing every 10 joints and circulate casing at bottom of 9-5/8" casing and 1 joint off bottom. Run centralizers per design or as required by the BLM. Wash to bottom if necessary.
 Record any fill on IADC report.
- 24. Rig up cementers and test lines to 2000 psi. Have cement supervisor INDEPENDENTLY check cement volumes and displacement volumes. Collect and identify cement sample from each pod. Minimize out of hole time.
- 25. Circulate casing on bottom for 6 times casing volume minimum or until hole cleans up. While circulating hold final job meeting with cement company going over cement volumes, mixing water requirements, displacement volumes, pump pressure and rates, and contingency plans for unexpected events (i.e. plug does not bump at theoretical displacement volume etc.). Add 50% excess for cement volumes required. Don't over displace.
- 26. Pump 20 barrels fresh water spacer ahead and pump cement volume per cement design for 7" x 5 1/2" casing and PPO representative.
 Bump plug to 500 psi over pump pressure. Drop plug behind good cement. Chase plug with 10 bbls sugar water or as directed by PPO Rep.
 Record cement to surface on IADC report.
- 27. Hang casing in minimum tension needed for pack off on wellhead. Close cement head for 8 hours.
- 28. WOC 8 hours before cutting off per BLM rules.
- 29. Nipple down BOP's and cut off casing and install 7" 10M x 11" 3M tubing head with 2 x 1-13/16" valves on one side and blind cap and BR plug on other side. Install with a blind flange and needle valve for completions.
- 30. Clean and jet pits. Release rig.
- 31. MAKE SURE LOCATION IS CLEAN BEFORE YOU LEAVE!!

REQUIREMENTS

- I. All drill pipe and drill collars to be inspected by Spur representative and a total count of all joints on location.
- Long string to be hydro tested before leaving yard.
- 3. Check all casing on location. Threads, size and weight.
- 4. All casing to be torqued to optimal torque.
- 5. All shoe tracks to be thread locked.
- 6. Mud Logger will tell what footage to catch samples.
- Keep bit record and grade bits.
- 8. Check all float equipment for correct size and threads.
- Sign and keep copies of field tickets to turn in to office.
- 10. Notify all State and Federal offices of events and record in morning report. (Date / Time / Name Of Person Talked To).
- Check and make sure all bond coating and centralizers are in proper places.
- PPO supervisor to be sure all casing tallies are correctly done.

- 13. PPO supervisor to check and ensure drill pipe tally is correct.
- 14. Record release dates of equipment on location.
- 15. Pre job safety meeting with all companies before job begins.
- 16. On rig floor when picking up BHA and making up float equipment.
- 17. Witness all testing and cement jobs.
- 18. Make sure that everything that is reported on IADC is correct.
- 19. Make sure all mud is correctly mixed by rig crews.
- 20. All accidents to be reported to office ASAP and a accident form sent in to office within 24 hours.
- 21. All trash is off location and lease road is clean at all times.
- 22. All records are kept as TIGHT HOLE and are not released.
- 23. Well record is sealed and sent to Artesia Office or is delivered by Spur supervisor to Artesia Office.

VENDOR LIST COMPANY	<u>SERVICE</u>	CONTACT NAME	CONTACT NUMBER
TBD	Drilling Rig		
TBD .	Directional Company		
TBD	Mud		
TBD	Cement		
NA	DST		
TBD	PVT's & Rig Monitor		
TBD	Mud Logging		
TBD	Conductor		
TBD	Closed Loop System		
TBD	Casing Crew & LD Machine		
TBD	Location & Road		
TBD	Stabilizers		
TBD	Float Equipment		
TBD	Open Hole Logging		
TBD	H2S Equipment		
TBD	Location & Trash Trailers		
TBD	Living Quarters		
TBD	Welder		
TBD	Forklift & Trucking		
TBD	Water		
TBD	Rotating Head		

PERSONNEL LIST

TBD, Drilling Foreman

Cell

John Nabors, Engineering/Operations

Office Cell 832-930-8502 281-904-8811

Ryan Barber, Engineering/Operations

Office

832-930-8502

Cell

832-544-9267

C.J. Lipinski, Geology

Office

832-930-8502

Cell

262-894-2811

Nash Bell, Land

Office

832-930-8502

Cell

512-461-1874

C



Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME) Dorami 33 Fed Com #4H OH

Plan: Plan #3

Standard Plan With Toolface

29 October, 2019



Standard Plan With Toolface

Project: E. Site D. Well Wellbore: O Design: P	lan #3	(NAD 83 - NME) m			Local Co-ordinate TVD: Reference: MD: Reference: MD: Reference: North Reference: Survey Calculatio Database:	Est RKB=17' @ 3546.00 Est RKB=17' @ 3546.00 Grid	177
Project Map System: Geo Datum: Map Zone:	US State Plane North Americar New Mexico Ea	n Datum 1983	83 - NME)	an en de emperatures (1832). The administrative of any security	System Datum:	Mean Sea Level	and the second s
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						•	



Standard Plan With Toolface

Company: Spur Energy Partners, LLC

Spur Energy Partners, LLC
Project: Eddy County, NM (NAD 83 - NME)
Dorami 33 Fed Com
Well: #4H
Wellbore: Plan #3

Local Co-ordinate Reference: TVD Reference:

Est RKB=17' @ 3546,00usft MD Reference: Est RKB=17' @ 3546,00usft

Grid

Survey/Calculation Method : Database: Minimum Curvature WBDS_SQL_2

Well #4H

Planned Survey

MD	·Inc	'Azi (azimuth)	TVD	N/S	E/W	V.Sec	DLeg	Build	Tum	TFace)
(usft)	L. O. time		(usft)	(usft)₹	(usft)	(usft)	(₹/100ft))	- (°/100ft)	(°/100ft) '\$	
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200,00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
600.00	2.00	180.42	599.98	-1.75	-0.01	0.01	2.00	2.00	0.00	180.420
700.00	4.00	180.42	699.84	-6.98	-0.05	0.02	2.00	2.00	0.00	0.000
800.00	6.00	180,42	799.45	-15.69	-0.12	0.05	2.00	2.00	0.00	0.000
900.00	8.00	180.42	898,70	-27.88	-0.20	0.09	2.00	2.00	0.00	0.000
1,000:00	10.00	180,42	997.47	-43.52	-0.32	0.14	2.00	2.00	0.00	0.000
1,100.00	12.00	180.42	1,095.62	-62.60	-0.46	0.21	2.00	2.00	0.00	0.000
1,173.49	13.47	180.42	1,167.30	-78.80	-0.58	0.26	2.00	2.00	0.00	0.000
1,200.00	13.47	180.42	1,193.08	-84.98	-0.62	0.28	0.00	0.00	0.00	0.000
1,300.00	13,47	180,42	1,290.33	-108.27	-0.79	0.36	0.00	0.00	0,00	0,000
1,400.00	13.47	180.42	1,387.58	-131.56	-0.96	0.44	0.00	0.00	0.00	0.000
1,500.00	13.47	180.42	1,484.83	-154.85	-1.14	0.51	0.00	0.00	0.00	0.000
1,600.00	13.47	180.42	1,582.08	-178.15	-1.31	0.59	0.00	0.00	0.00	0.000
1,700.00	13.47	180.42	1,679.33	-201.44	-1,48	0.67	0.00	0.00	0.00	0.000
1,800.00	13.47	180.42	1,776.58	-224.73	-1.65	0.75	0.00	0.00	0.00	0.000
1,872,69	13.47	180,42	1,847.27	-241.66	-1.77	0.80	0.00	0.00	0.00	0.000
1,900.00	13.35	187.47	1,873.84	-247.97	-2.20	1.21	6.00	-0.42	25.82	97.478
1,950.00	13.65	200,28	1,922.47	-259,23	-5.00	3,96	6.00	0.59	25.63	90.618
2,000.00	14.56	212.04	1,970.97	-270,09	-10.38	9.30	6.00	1.82	23.52	78,156
2,050.00	15.98	222.10	2,019.21	-280.53	-18.33	17.21	6.00	2.84	20.12	66.750
2,100.00	17.78	230,37	2,067.06	-290.51	-28.83	27.66	6.00	3.61	16.53	57.042
2,150.00	19.87	237.06	2,114.39	-300.00	-41.84	40.64	6.00	4.18	13.37	49.129



Standard Plan With Toolface

Company. Spur Energy Partners, LLC
Project Eddy County, NM (NAD 83 - NME)
Site Dorami 33 Fed Com
Well: #4H
Wellbore OH
Design: Plan #3

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: Survey Calculation Method: Database:

Well #4H

Est RKB=17' @ 3546.00usft Est RKB=17' @ 3546.00usft

Grid

Minimum Curvature WBDS_SQL_2

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Planned Survey				E STREET THE STREET			201	tar every or a security		
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2,200.00	22.16	242.47	2,161.06	-308.98	-57.34	56.10	6.00	4.58	10.82	42.799
2,250.00	24.60	246.88	2,206.96	-317.43	-75.28	74.01	6.00	4.87	8.83	37.749
2,300.00	27.14	250,53	2,251.95	-325,32	-95.61	94.30	6,00	5.09	7,30	33.696
2,350.00	29.77	253,59	2,295.90	-332.63	-118.27	116.94	6.00	5,25	6.12	30.412
2,400.00	32.45	256.19	2,338.71	-339.34	-143.21	141.85	6.00	5.37	5.20	27.722
2,450.00	35.18	258.43	2,380,25	-345.44	-170.36	168.97	6.00	5.46	4.48	25.494
2,500.00	37.94	260.38	2,420.41	-350.90	-199.63	198.22	6.00	5,53	3.91	23,632
2,550.00	40.74	262.11	2,459.08	-355.70	-230.95	229.52	6.00	5.59	3,45	22.061
2,600.00	43.55	263.65	2,496.14	-359.85	-264.24	262.80	6.00	5.63	3.08	20.726
2,650.00	46,39	265.04	2,531.51	-363:32	-299.40	297.94	6.00	5.67	2.78	19.583
2,700.00—	49.24	266,30	2,565.09	366.11	-336.34	334.87	6.00	5.70	2.53	18,601
2,750.00	52,10	267.46	2,596.77	-368.21	-374.96	373.48	6.00	5,73	2.32	17,752
2,800.00	54.98	268.53	2,626.48	-369.61	-415.14	413.65	6.00	5.75	2.14	17.018
2,850.00	57.86	269.53	2,654.14	-370.30	-456.79	455.30	6.00	5.76	2,00	16.381
2,887.05	60.00	270.23	2,673.26	-370.37	-488.52	487.03	6.00	5.78	1.89	15.828
2,900.00	60.00	270.23	2,679.73	-370,32	-499.73	498.24	0.00	0.00	0.00	0.000
3,000.00	60.00	270.23	2,729.73	-369.97	-586.33	584.84	0.00	0.00	0.00	0.000
3,087.05	60.00	270.23	2,773.26	-369.67	-661.72	660.23	0.00	0.00	0.00	0.000
3,100.00	61.29	270.23	2,779.61	-369.63	-673.01	671.52	10.00	10.00	0.00	0.000
3,150.00	66.29	270.23	2,801,68	-369,45	-717.85	716.37	10.00	10,00	0.00	0.000
3,200.00	71,29	270.23	2,819.76	-369,26	-764.45	762.97	10.00	10,00	0.00	0.000
3,250.00	76.29	270.23	2,833.71	-369.07	-812.45	810.96	10.00	10.00	0.00	0.000
3,300.00	81.29	270.23	2,843.42	-368.87	-861.48	860.00	10.00	10.00	0.00	0.000
3,350.00	86.29	270.23	2,848.82	-368.67	-911.17	909.69	10.00	10.00	0.00	0.000
3,392.05	90.50	270.23	2,850.00	-368.50	-953.20	951.71	10.00	10.00	0.00	0.000
3,400.00	90.50	270.23	2,849.93	-368.47	- 961.15	959.66	0.00	0.00	0.00	0.000
3,500.00	90.50	270.23	2,849.06	-368.07	-1,061.14	1,059.66	0.00	0.00	0.00	0.000



Standard Plan With Toolface

Spur Energy Partners, LLC

Project: Eddy County, NM (NAD 83 - NME)

Site Dorami 33 Fed Com

Well: #4H Wellbore: OH Local Go-ordinate Reference:

TVD Reference:

North Reference St Survey Calculation Method Database: ∛Well #4H

Est RKB=17' @ 3546.00usft Est RKB=17' @ 3546.00usft

Grid

Minimum Curvature
WBDS_SQL_2

Planned Survey

Planned Survey	سيكتفينك خنقلندري	#12 PE PAR THE 13 12 PA	रक्ष्य उल्लेख	पद्धारम् । सम्पर्यक्रम्य स् राप्त	BANKAT PARISA	\$9.15°	The state of the state of the	The time to the second	8767 G. V.	BE THE PARTY
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3,700.00	90.50	270.23	2,847.31	-367.26	-1,261.13	1,259.65	0.00	0.00	0.00	0,000
3,800.00	90.50	270.23	2,846.44	-366.86	-1,361.13	1,359.65	0.00	0.00	0.00	0.000
3,900.00	90.50	270.23	2,845.57	-366.46	-1,461.12	1,459.64	0.00	0.00	0.00	0.000
4,000.00	90.50	270.23	2,844.69	-366.06	-1,561.12	1,559.64	0.00	0.00	0.00	0.000
4,100.00	90.50	270.23	2,843.82	-365.65	-1,661.11	1,659.63	0.00	0.00	0.00	0.000
4,200.00	90.50	270.23	2,842.95	-365.25	-1,761.11	1,759.63	0.00	0.00	0.00	0.000
4,300.00	90.50	270.23	2,842.08	-364.85	-1,861.11	1,859.63	0.00	0,00	0.00	0.000
4,400.00	90,50	270.23	2,841.20	-364.45	-1,961.10	1,959.62	0.00	0.00	0.00	0.000
4,500.00	90.50	270.23	2,840.33	-364.05	-2,061.10	2,059.62	0.00	0.00	0.00	0.000
4,600,00-	90.50	270.23	2,839.46	-363.64	-2,161.09	2,159.61	0.00	0,00	0.00	0.000
4,700.00	90.50	270.23	2,838.59	-363.24	-2,261.09	2,259.61	0.00	0.00	0.00	0.000
4,800.00	90.50	270.23	2,837.71	-362.84	-2,361.08	2,359.61	0.00	0.00	0.00	0.000
4,900.00	90.50	270.23	2,836.84	- 362.44	-2,461.08	2,459.60	0.00	0,00	0.00	0.000
5,000.00	90.50	270.23	2,835.97	-362.04	-2,561.07	2,559.60	0,00	0.00	0.00	0.000
5,100.00	90.50	270.23	2,835.10	-361.63	-2,661.07	2,659.60	0.00	0.00	0.00	0.000
5,200,00	90.50	270.23	2,834.22	-361.23	-2,761.06	2,759.59	0.00	0.00	0.00	0.000
5,300.00	90.50	270.23	2,833.35	-360.83	-2,861.06	2,859,59	0,00	0.00	0.00	0.000
5,400.00	90.50	270.23	2,832.48	-360.43	-2,961.05	2,959.58	0.00	0.00	0.00	0.000
5,500.00	90,50	270.23	2,831.60	-360,03	-3,061.05	3,059.58	0.00	0.00	0.00	0.000
5,600.00	90,50	270.23	2,830,73	-359.63	-3,161.05	3,159.58	0.00	0.00	0.00	0.000
5,700.00	90.50	270.23	2,829.86	-359.22	-3,261,04	3,259.57	0.00	0,00	0.00	0,000
5,800.00	90.50	270.23	2,828.99	-358.82	-3,361.04	3,359.57	0.00	0.00	0.00	0.000
5,900.00	90.50	270.23	2,828.11	-358.42	-3,461.03	3,459.57	0.00	0.00	0.00	0.000
6,000.00	90.50	270.23	2,827.24	-358.02	-3,561.03	3,559.56	0.00	0.00	0.00	0.000
6,100.00	90.50	270.23	2,826.37	-357.62	-3,661.02	3,659.56	0.00	0.00	0.00	0.000
6,200.00	90.50	270.23	2,825.50	-357.21	-3,761.02	3,759.55	0.00	0.00	0.00	0.000



Standard Plan With Toolface

Company 🙌 Spur Energy Partners, LLC Project:

Eddy County, NM (NAD 83 - NME)

Site: Dorami 33 Fed Com

Well: Wellbore: A OH Design:

Local Co ordinate Reference: Well #4H TVD Reference Est RKB= MD Reference: Est RKB=

North Reference Survey Calculation Method Database

Est RKB=17' @ 3546,00usft Est RKB=17' @ 3546.00usft

Minimum Curvature WBDS_SQL_2

r Hanned Survey					TO ANY THE PERF			AND THE PERSON	CHECKE THE	
MD s. (usfi)	inc j	((azimuth) (°)	TVD (usft)	N/S (usff)	E/W (usft)	V. Sec (usft)		3uild (100ft)	Turn 1 /100ft) 1 1 1 1 1 1 1 1 1	Faces
6,300.00	90.50	270.23	2,824.62	-356.81	-3,861.01	3,859.55	0.00	0.00	0.00	0.000
6,400.00	90.50	270.23	2,823.75	-356.41	-3,961.01	3,959.55	0.00	0.00	0.00	0.000
6,500.00	90,50	270.23	2,822.88	-356,01	-4,061.00	4,059.54	0.00	0.00	0.00	0.000
6,600.00	90.50	270.23	2,822.01	-355.61	-4,161.00	4,159.54	0.00	0.00	0.00	0.000
6,700.00	90.50	270,23	2,821.13	-355.20	-4,260.99	4,259.53	0.00	0.00	0.00	0.000
6,800.00	90,50	270.23	2,820.26	-354.80	-4,360.99	4,359.53	0.00	0.00	0.00	0.000
6,900.00	90.50	270.23	2,819.39	-354.40	-4,460.99	4,459.53	0.00	0.00	0.00	0.000
7,000.00	90.50	270.23	2,818.52	-354.00	-4,560.98	4,559.52	0.00	0.00	0.00	0.000
7,100.00	90.50	270.23	2,817.64	-353.60	-4,660.98	4,659.52	0.00	0.00	0.00	0.000
7,200.00	90.50	270,23	2,816.77	-353.19	-4,760.97	4,759.52	0.00	0.00	0.00	0.000
7,300.00	90,50	270.23	2,815,90	-352.79	-4,860.97	4,859.51	0.00	0.00	0.00	0.000
7,400.00	90,50	270.23	2,815.02	-352,39	-4,960.96	4,959.51	0.00	0.00	0.00	0.000
7,500.00	90.50	270.23	2,814.15	-351.99	-5,060.96	5,059.50	0.00	0.00	0.00	0.000
7,600.00	90.50	270.23	2,813.28	-351,59	-5,160.95	5,159.50	0.00	0.00	0.00	0.000
7,700.00	90.50	270.23	2,812.41	-351.18	-5,260.95	5,259.50	0.00	0.00	0.00	0.000
7,800.00	90.50	270.23	2,811.53	-350.78	-5,360.94	5,359.49	0.00	0.00	0.00	0.000
7,900.00	90.50	270.23	2,810.66	-350.38	-5,460.94	5,459.49	0.00	0.00	0.00	0.000
8,000.00	90.50	270.23	2,809.79	-349,98	-5,560.93	5,559.49	0.00	0.00	0.00	0.000
8,100.00	90.50	270.23	2,808.92	-349.58	-5,660.93	5,659.48	0.00	0.00	0.00	0.000
8,200.00	90.50	270,23	2,808.04	-349.17	-5,760.93	5,759.48	0.00	0.00	0.00	0.000
8,300.00	90,50	270.23	2,807.17	-348.77	-5,860.92	5,859.47	0.00	0.00	0.00	0.000
8,400.00	90,50	270,23	2,806.30	-348.37	-5,960.92	5,959.47	0.00	0.00	0.00	0.000
8,491.89	90,50	270.23	2,805.50	-348,00	-6,052.80	6,051.35	0.00	0.00	0.00	0.000
8,500.00	90.50	270.23	2,805.43	-347.97	-6,060.91	6,059.47	0.00	0.00	0.00	0,000
8,566.89	90.50	270.23	2,804.84	-347.70	- 6,127.80	6,126.35	0.00	0.00	0.00	0.000
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SPUR ENERGY

Wellbenders

Standard Plan With Toolface

Company: Spur Energy Partners, LLC Local/Co-ordinate Reference: Well #4H Project: TVD Reference: Eddy County, NM (NAD 83 - NME) Est RKB=17' @ 3546.00usft Site: MD Reference: Est RKB=17' @ 3546.00usft Dorami 33 Fed Com Well: North Reference: Grid Wellbore: Design: Minimum Curvature ОН Survey Calculation Method: WBDS_SQL_2 Plan #3 (Database:

Charles Don	Approved By:	Date	٠.
Checked By:	Approved By:	Date	; .
1			



Spur Energy Partners, LLC

Well:

Dorami 33 Federal Com #4h

Location:

SHL

Section 34 T19S R25E 1910' FSL 850' FWL Lat: 32.614965° N Long: -104.478446°W Section 33 T19S R25E 1531.2' FSL 25' FWL

BHL

Lat: 32.613985° N Long: -104.498346°V

County:

Eddy

State:

New Mexico

Rig:

TBD

Spud Date:

TBD

AFE Number:

BD .

True Vertical Depth:

2,805'

Total Measured Depth:

8,567'

Elevation:

GL = 3529' KB = 3546'

Directions:

FROM THE INTERSECTION OF U.S. HWY. 285 AND CO. RD. 23 (ROCK DAISY RD.) GO WEST ON CO. RD. 23 APPROX. 3.9 MILES TO CALICHE LEASE ROAD, TURN LEFT AND GO SOUTHEAST APPROX. 0.2 MILES TO PROPOSED ACCESS ROAD. FOLLOW

SIGNS TO LOCATION.

Prepared By:

Ryan Barber

Operations Manager:

John Nabors

Engineering:

Ryan Barber

Exploration:

C.J. Lipinski

Land:

Nash Bell