

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval, Division Director
Oil Conservation Division



Notice of C-104 Denial and Request for Information

OCD denies your C-104 – *Request for Allowable and Authorization to Transport* because it is incomplete or conflicts with other information provided to OCD.

The sale or transport of product without a C-104 approved by OCD violates the Oil and Gas Act and the implementing rules, including 19.15.7.15 and 19.15.16.19 NMAC.

To avoid an enforcement action, you must submit the indicated information no later than 30 days after receipt of this notice.

Test Allowable, New Well and Recompleted Well

*Amend C-104 **

- ☐ C-103 (or BLM equivalent) for all casing strings

☐ Spud Notice

☐ Surface Casing

☒ Intermediate Casing (if applicable)

☐ Additional Intermediate Casing (if applicable)

☒ Production Casing or Liner

Need prod pressure test

** Sec. 28 - Missing Tbg. size and class.*

** Sec. 29 - Review, Confirm Depths.*

** Sec. 30 - Review, Confirm Cement.*

- ☐ Applicable Order (NSL, NSP, Other _____)

- ☐ Deviation Survey for Vertical Wells

- ☒ Directional Survey *Certified*

- ☒ C-102 (As-Drilled Plat for Horizontal Well)

New Well and Recompleted Well Only

- ☒ C-103 Completion Sundry (or BLM equivalent) *approved copy from BLM*

- ☒ C-105 Completion Report (or BLM equivalent) *approved copy*

- ☐ All Logs Run on Well

If you have any questions please contact the local OCD District Office

RECEIVED

SEP 12 2019

Form C-102

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

Revised August 1, 2011

one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45440	² Pool Code 39350	³ Pool Name Livingston Ridge; Bone Spring
⁴ Property Code	⁵ Property Name TOMB RAIDER 1-12 FED	⁶ Well Number 514H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3475.7

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
2	1	23 S	31 E		360	NORTH	2365	EAST	EDDY

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
B	13	23 S	31 E		25	NORTH	2505	EAST	EDDY

¹² Dedicated Acres 320-NSL	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

NW CORNER SEC. 1 LAT. = 32.3407245°N LONG. = 103.7400556°W NMSP EAST (FT) N = 488195.03 E = 724564.59 W/4 CORNER SEC. 1 LAT. = 32.3334649°N LONG. = 103.7400345°W NMSP EAST (FT) N = 485554.08 E = 724585.72 NW CORNER SEC. 12 LAT. = 32.3262057°N LONG. = 103.7400123°W NMSP EAST (FT) N = 482913.26 E = 724607.20 W/4 CORNER SEC. 12 LAT. = 32.3189531°N LONG. = 103.7400200°W NMSP EAST (FT) N = 480274.75 E = 724619.44 SW CORNER SEC. 12 LAT. = 32.3116999°N LONG. = 103.7400280°W NMSP EAST (FT) N = 477636.10 E = 724631.57 W/4 CORNER SEC. 12 LAT. = 32.3044481°N LONG. = 103.7400341°W NMSP EAST (FT) N = 474997.91 E = 724644.28 SW CORNER SEC. 12 LAT. = 32.2971988°N LONG. = 103.7400387°W NMSP EAST (FT) N = 472360.64 E = 724651.46		N/4 CORNER SEC. 1 LAT. = 32.3407180°N LONG. = 103.7315040°W NMSP EAST (FT) N = 488207.42 E = 727205.71 TOMB RAIDER 1-12 FED 514H ELEV. = 3475.7 LAT. = 32.3397278°N (NAD83) LONG. = 103.7306116°W NMSP EAST (FT) N = 487848.73 E = 727483.34 N/4 CORNER SEC. 12 LAT. = 32.3262026°N LONG. = 103.7314852°W NMSP EAST (FT) N = 482926.80 E = 727241.16 S/4 CORNER SEC. 12 LAT. = 32.3116988°N LONG. = 103.7314958°W NMSP EAST (FT) N = 477650.42 E = 727267.52 AS-DILLED BOTTOM OF HOLE LAT. = 32.3116306°N LONG. = 103.7310671°W NMSP EAST (FT) N = 477626.31 E = 727400.11 S/4 CORNER SEC. 12 LAT. = 32.2971983°N LONG. = 103.7315037°W NMSP EAST (FT) N = 472375.15 E = 727294.69		NE CORNER SEC. 1 LAT. = 32.3407105°N LONG. = 103.7229557°W NMSP EAST (FT) N = 488219.63 E = 729845.81 E/4 CORNER SEC. 1 LAT. = 32.3334554°N LONG. = 103.7229555°W NMSP EAST (FT) N = 485580.24 E = 729860.91 NE CORNER SEC. 12 LAT. = 32.3262014°N LONG. = 103.7229554°W NMSP EAST (FT) N = 482941.27 E = 729875.98 E/4 CORNER SEC. 12 LAT. = 32.3189486°N LONG. = 103.7229585°W NMSP EAST (FT) N = 480302.72 E = 729890.06 SE CORNER SEC. 12 LAT. = 32.3116930°N LONG. = 103.7229595°W NMSP EAST (FT) N = 477863.17 E = 729904.77 E/4 CORNER SEC. 12 LAT. = 32.3044384°N LONG. = 103.7229618°W NMSP EAST (FT) N = 475023.97 E = 729919.08 SE CORNER SEC. 12 LAT. = 32.2971933°N LONG. = 103.7229608°W NMSP EAST (FT) N = 472388.16 E = 729934.39		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. <i>Jenny Harms</i> 9-10-2019 Signature Date Jenny Harms Printed Name Jenny.harms@dvn.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. MAY 21, 2018 Date of Survey <i>William F. Jaramillo</i> Signature and Seal of Professional Surveyor Certificate Number: 12797 NO. 6214A						

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SEP 12 2019

DISTRICT 7 - ARTESIA O.C.D.

Intent ☐ As Drilled ☒

API #

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION CO., L.P.	TOMB RAIDER 1-12 FED	514H

Kick Off Point (KOP)

UL	Section 1	Township 23S	Range 31E	Lot 2	Feet 59	From N/S NORTH	Feet 2514	From E/W EAST	County EDDY
Latitude 32.3405552					Longitude 103.7310924			NAD 83	

First Take Point (FTP)

UL	Section 1	Township 23S	Range 31E	Lot 2	Feet 479	From N/S NORTH	Feet 2509	From E/W EAST	County EDDY
Latitude 32.3394018					Longitude 103.7310772			NAD 83	

Last Take Point (LTP)

UL 0	Section 12	Township 23S	Range 31E	Lot	Feet 119	From N/S SOUTH	Feet 2503	From E/W EAST	County EDDY
Latitude 32.3120260					Longitude 103.7310599			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐ no non-standard locationIs this well an infill well? ☐ no

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018



I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **01/05/19** thru **01/22/19** conduct or supervise the taking of a **MWD Survey** from a depth of **180'** to a depth of **19262'**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Wellbenders Directional Services**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **Devon Energy** for the **Tomb Raider 1-12 Fed 514H API No. 30-015-45440** in **Eddy County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Wellbenders Directional Services**.

Larry Wright



Devon Energy

Eddy Co., NM (Nad83 - East Zone)

Tomb Raider 1-12 Fed

#514H

OH

Design: OH

End Of Well Report

22 January, 2019

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SEP 12 2019

DISTRICT 7 - ARTESIA O.C.D.





Wellbenders
End Of Well Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well #514H
Project:	Eddy Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Site:	Tomb Raider 1-12 Fed	MD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Well:	#514H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Project	Eddy Co., NM (Nad83 - East Zone)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Tomb Raider 1-12 Fed			
Site Position:	Northing:	487,848.73 usft	Latitude:	32.339728
From: Map	Easting:	727,483.34 usft	Longitude:	-103.730612
Position Uncertainty:	Slot Radius:	13.200 in	Grid Convergence:	0.322 °

Well	#514H					
Well Position	+N/-S	0.00 usft	Northing:	487,848.73 usft	Latitude:	32.339728
	+E/-W	0.00 usft	Easting:	727,483.34 usft	Longitude:	-103.730612
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,475.70 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	User Defined	1/10/2019	7.000	60.090	48,043.00000000

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	179.68	

Survey Program	Date 1/22/2019				
From	To	Survey (Wellbore)	Tool Name	Description	
(usft)	(usft)				
180.00	19,262.00	Survey #1 (OH)	MWD+IFR1	OWSG MWD + IFR1	



Wellbenders End Of Well Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well #514H
Project:	Eddy Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Site:	Tomb Raider 1-12 Fed	MD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Well:	#514H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180.00	0.70	31.47	180.00	0.94	0.57	-0.93	180.00	31.47	0.39	
267.00	0.79	30.50	266.99	1.91	1.16	-1.90	87.00	30.96	0.10	
360.00	0.44	14.85	359.98	2.81	1.57	-2.80	93.00	24.91	0.41	
453.00	0.48	359.21	452.98	3.54	1.66	-3.53	93.00	6.69	0.14	
545.00	0.35	356.57	544.98	4.21	1.64	-4.20	92.00	358.10	0.14	
637.00	0.40	327.66	636.98	4.76	1.45	-4.75	92.00	341.13	0.21	
730.00	0.09	305.24	729.97	5.07	1.21	-5.07	93.00	323.60	0.34	
761.00	0.09	354.55	760.97	5.11	1.19	-5.11	31.00	329.89	0.24	
880.00	0.04	263.76	879.97	5.20	1.14	-5.19	119.00	330.46	0.08	
972.00	0.13	217.79	971.97	5.12	1.05	-5.11	92.00	228.12	0.12	
1,064.00	0.13	274.66	1,063.97	5.04	0.88	-5.04	92.00	246.22	0.13	
1,157.00	0.22	223.51	1,156.97	4.92	0.65	-4.92	93.00	242.07	0.18	
1,250.00	0.31	220.17	1,249.97	4.60	0.37	-4.60	93.00	221.56	0.10	
1,343.00	0.31	195.21	1,342.97	4.16	0.14	-4.16	93.00	207.69	0.14	
1,436.00	0.40	209.53	1,435.97	3.64	-0.09	-3.64	93.00	203.28	0.14	
1,528.00	0.48	207.51	1,527.97	3.02	-0.43	-3.02	92.00	208.43	0.09	
1,620.00	0.40	203.38	1,619.96	2.38	-0.73	-2.38	92.00	205.63	0.09	
1,713.00	0.44	250.49	1,712.96	1.96	-1.20	-1.97	93.00	228.12	0.36	
1,808.00	0.44	213.75	1,807.96	1.54	-1.74	-1.55	95.00	232.12	0.29	
1,902.00	0.31	208.74	1,901.96	1.01	-2.07	-1.03	94.00	211.68	0.14	
1,997.00	0.26	194.94	1,996.96	0.58	-2.24	-0.59	95.00	202.45	0.09	
2,091.00	0.26	175.87	2,090.96	0.16	-2.28	-0.18	94.00	185.40	0.09	
2,186.00	0.40	157.32	2,185.95	-0.36	-2.14	0.35	95.00	164.61	0.18	
2,281.00	0.35	155.04	2,280.95	-0.93	-1.89	0.92	95.00	156.26	0.05	
2,375.00	0.26	148.80	2,374.95	-1.37	-1.66	1.36	94.00	152.38	0.10	
2,470.00	0.00	0.00	2,469.95	-1.55	-1.55	1.55	95.00	148.80	0.27	



Wellbenders
End Of Well Report



Company: Devon Energy
Project: Eddy Co., NM (Nad83 - East Zone)
Site: Tomb Raider 1-12 Fed
Well: #514H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #514H
RKB=30' @ 3505.70usft (Cactus 108)
RKB=30' @ 3505.70usft (Cactus 108)
Grid
Minimum Curvature
WBDS_SQL_2

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
2,565.00	0.88	325.37	2,564.95	-0.95	-1.96	0.94	95.00	325.37	0.93
2,659.00	1.85	313.15	2,658.92	0.68	-3.48	-0.70	94.00	317.08	1.07
2,754.00	3.69	320.80	2,753.80	4.10	-6.53	-4.13	95.00	318.25	1.97
2,849.00	4.48	327.04	2,848.56	9.58	-10.48	-9.64	95.00	324.22	0.95
2,943.00	4.04	328.80	2,942.30	15.49	-14.19	-15.57	94.00	327.87	0.49
3,038.00	3.96	330.12	3,037.07	21.20	-17.56	-21.29	95.00	329.45	0.13
3,133.00	3.69	332.40	3,131.86	26.75	-20.61	-26.87	95.00	331.22	0.33
3,227.00	3.16	325.90	3,225.69	31.58	-23.47	-31.71	94.00	329.40	0.70
3,322.00	2.95	325.20	3,320.56	35.75	-26.33	-35.90	95.00	325.56	0.22
3,417.00	2.90	328.10	3,415.43	39.80	-28.99	-39.96	95.00	326.64	0.16
3,512.00	3.78	327.13	3,510.27	44.47	-31.96	-44.65	95.00	327.55	0.93
3,606.00	3.65	328.97	3,604.07	49.64	-35.19	-49.83	94.00	328.03	0.19
3,701.00	2.29	335.48	3,698.94	53.95	-37.53	-54.16	95.00	331.48	1.47
3,796.00	2.42	335.30	3,793.86	57.50	-39.16	-57.72	95.00	335.39	0.14
3,891.00	3.91	341.72	3,888.72	62.40	-41.01	-62.63	95.00	339.27	1.61
3,985.00	3.87	347.87	3,982.50	68.55	-42.69	-68.78	94.00	344.78	0.45
4,080.00	2.95	357.10	4,077.33	74.12	-43.48	-74.36	95.00	351.86	1.12
4,174.00	3.30	343.38	4,171.19	79.13	-44.38	-79.38	94.00	349.85	0.88
4,269.00	3.60	342.32	4,266.02	84.59	-46.07	-84.85	95.00	342.83	0.32
4,364.00	3.65	340.57	4,360.83	90.29	-47.98	-90.55	95.00	341.44	0.13
4,458.00	3.56	335.82	4,454.64	95.77	-50.17	-96.05	94.00	338.22	0.33
4,553.00	3.38	337.93	4,549.47	101.06	-52.43	-101.35	95.00	336.85	0.23
4,647.00	3.30	338.19	4,643.31	106.14	-54.48	-106.44	94.00	338.06	0.09
4,742.00	3.87	335.47	4,738.12	111.59	-56.82	-111.91	95.00	336.72	0.63
4,837.00	4.35	336.17	4,832.88	117.80	-59.61	-118.13	95.00	335.84	0.51
4,932.00	3.96	338.28	4,927.63	124.15	-62.28	-124.49	95.00	337.18	0.44
5,026.00	3.74	337.14	5,021.42	129.99	-64.67	-130.35	94.00	337.73	0.25



Wellbenders
End Of Well Report



Company: Devon Energy
Project: Eddy Co., NM (Nad83 - East Zone)
Site: Tomb Raider 1-12 Fed
Well: #514H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #514H
TVD Reference: RKB=30' @ 3505.70usft (Cactus 108)
MD Reference: RKB=30' @ 3505.70usft (Cactus 108)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)	
5,121.00	3.65	339.07	5,116.22	135.67	-66.96	-136.04	95.00	338.09	0.16	
5,216.00	3.74	340.74	5,211.02	141.42	-69.06	-141.80	95.00	339.92	0.15	
5,310.00	3.60	341.18	5,304.83	147.10	-71.02	-147.50	94.00	340.96	0.15	
5,405.00	3.74	335.03	5,399.64	152.73	-73.29	-153.14	95.00	338.05	0.44	
5,499.00	3.82	332.74	5,493.43	158.30	-76.02	-158.72	94.00	333.87	0.18	
5,594.00	3.74	334.77	5,588.22	163.91	-78.79	-164.35	95.00	333.74	0.16	
5,689.00	3.52	335.29	5,683.03	169.37	-81.33	-169.82	95.00	335.02	0.23	
5,784.00	3.34	336.44	5,777.86	174.55	-83.66	-175.02	95.00	335.85	0.20	
5,878.00	3.34	337.93	5,871.70	179.60	-85.78	-180.08	94.00	337.18	0.09	
5,966.00	3.34	339.16	5,959.55	184.37	-87.65	-184.86	88.00	338.55	0.08	
6,066.00	3.03	342.32	6,059.40	189.61	-89.49	-190.11	100.00	340.66	0.36	
6,161.00	3.03	339.51	6,154.27	194.36	-91.13	-194.86	95.00	340.92	0.16	
6,256.00	3.34	329.84	6,249.12	199.10	-93.40	-199.62	95.00	334.44	0.65	
6,350.00	3.69	327.30	6,342.94	204.01	-96.41	-204.55	94.00	328.51	0.41	
6,445.00	4.00	325.36	6,437.73	209.31	-99.95	-209.87	95.00	326.29	0.35	
6,540.00	4.09	323.25	6,532.49	214.75	-103.86	-215.33	95.00	324.29	0.18	
6,634.00	4.00	321.67	6,626.26	220.01	-107.90	-220.61	94.00	322.47	0.15	
6,729.00	3.69	312.27	6,721.05	224.67	-112.21	-225.29	95.00	317.16	0.74	
6,824.00	3.69	318.86	6,815.85	229.02	-116.49	-229.67	95.00	315.56	0.45	
6,918.00	3.56	327.56	6,909.66	233.77	-120.04	-234.43	94.00	323.13	0.60	
7,013.00	3.43	345.75	7,004.49	239.01	-122.33	-239.69	95.00	336.48	1.17	
7,108.00	3.03	349.18	7,099.34	244.23	-123.50	-244.92	95.00	347.36	0.47	
7,202.00	2.95	343.64	7,193.21	248.99	-124.64	-249.68	94.00	346.45	0.32	
7,297.00	2.90	337.67	7,288.09	253.56	-126.25	-254.26	95.00	340.68	0.32	
7,392.00	2.68	337.31	7,382.97	257.83	-128.02	-258.54	95.00	337.50	0.23	
7,486.00	2.29	333.80	7,476.89	261.54	-129.69	-262.26	94.00	335.69	0.45	
7,581.00	3.03	333.80	7,571.78	265.50	-131.64	-266.23	95.00	333.80	0.78	



Wellbenders
End Of Well Report



Company: Devon Energy
Project: Eddy Co., NM (Nad83 - East Zone)
Site: Tomb Raider 1-12 Fed
Well: #514H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #514H
RKB=30' @ 3505.70usft (Cactus 108)
RKB=30' @ 3505.70usft (Cactus 108)
Grid
Minimum Curvature
WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
7,675.00	3.08	333.01	7,665.65	269.98	-133.88	-270.72	94.00	333.40	0.07
7,770.00	3.38	337.67	7,760.50	274.84	-136.10	-275.60	95.00	335.45	0.42
7,865.00	3.69	340.39	7,855.32	280.31	-138.19	-281.08	95.00	339.09	0.37
7,960.00	3.25	337.49	7,950.14	285.68	-140.25	-286.46	95.00	339.03	0.50
8,054.00	3.21	334.50	8,043.99	290.52	-142.40	-291.31	94.00	336.00	0.18
8,149.00	2.73	330.55	8,138.87	294.89	-144.66	-295.69	95.00	332.68	0.55
8,244.00	2.42	329.23	8,233.77	298.58	-146.80	-299.40	95.00	329.93	0.33
8,326.00	2.24	326.94	8,315.70	301.41	-148.56	-302.24	82.00	328.13	0.25
8,433.00	4.35	203.81	8,422.60	299.45	-151.34	-300.29	107.00	234.80	5.50
8,528.00	14.95	176.65	8,516.16	283.87	-152.08	-284.72	95.00	182.72	11.84
8,622.00	21.19	175.33	8,605.48	254.81	-149.99	-255.64	94.00	175.88	6.65
8,717.00	31.87	180.25	8,690.36	212.49	-148.70	-213.31	95.00	178.25	11.47
8,811.00	41.10	182.80	8,765.86	156.69	-150.32	-157.53	94.00	181.66	9.95
8,906.00	49.01	179.46	8,832.93	89.53	-151.51	-90.38	95.00	181.01	8.69
9,000.00	56.79	177.09	8,889.59	14.66	-149.17	-15.49	94.00	178.21	8.52
9,094.00	64.04	176.65	8,935.97	-66.91	-144.70	66.10	94.00	176.86	7.72
9,189.00	76.13	179.90	8,968.28	-156.01	-142.11	155.21	95.00	178.34	13.12
9,252.00	86.24	181.92	8,977.92	-218.17	-143.12	217.37	63.00	180.92	16.36
9,336.00	91.52	182.36	8,979.56	-302.07	-146.25	301.24	84.00	182.14	6.31
9,430.00	90.77	182.45	8,977.68	-395.96	-150.20	395.12	94.00	182.41	0.80
9,525.00	89.19	181.13	8,977.71	-490.91	-153.16	490.05	95.00	181.79	2.17
9,620.00	89.54	181.13	8,978.77	-585.89	-155.04	585.01	95.00	181.13	0.37
9,715.00	90.59	181.22	8,978.66	-680.87	-156.98	679.98	95.00	181.17	1.11
9,809.00	89.49	180.17	8,978.59	-774.86	-158.12	773.96	94.00	180.69	1.62
9,904.00	90.51	179.64	8,978.59	-869.85	-157.97	868.96	95.00	179.90	1.21
9,999.00	90.42	179.55	8,977.82	-964.85	-157.30	963.96	95.00	179.59	0.13
10,094.00	90.46	179.29	8,977.09	-1,059.84	-156.33	1,058.95	95.00	179.42	0.28



Wellbenders
End Of Well Report



Company: Devon Energy
Project: Eddy Co., NM (Nad83 - East Zone)
Site: Tomb Raider 1-12 Fed
Well: #514H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference: RKB=30' @ 3505.70usft (Cactus 108)
MD Reference: RKB=30' @ 3505.70usft (Cactus 108)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
10,189.00	90.59	179.38	8,976.22	-1,154.83	-155.23	1,153.95	95.00	179.33	0.17
10,283.00	90.64	179.11	8,975.21	-1,248.82	-153.99	1,247.94	94.00	179.25	0.29
10,376.00	91.03	179.02	8,973.86	-1,341.79	-152.48	1,340.92	93.00	179.07	0.43
10,468.00	89.71	179.38	8,973.26	-1,433.78	-151.19	1,432.92	92.00	179.20	1.49
10,561.00	89.63	180.34	8,973.80	-1,526.78	-150.96	1,525.91	93.00	179.86	1.04
10,653.00	90.46	180.78	8,973.73	-1,618.77	-151.86	1,617.90	92.00	180.56	1.02
10,745.00	91.56	181.13	8,972.11	-1,710.74	-153.40	1,709.86	92.00	180.95	1.25
10,838.00	90.24	181.84	8,970.65	-1,803.70	-155.81	1,802.80	93.00	181.49	1.61
10,930.00	90.20	182.10	8,970.29	-1,895.64	-158.97	1,894.73	92.00	181.97	0.29
11,022.00	89.01	181.05	8,970.93	-1,987.60	-161.50	1,986.67	92.00	181.58	1.72
11,115.00	88.88	181.13	8,972.64	-2,080.57	-163.27	2,079.63	93.00	181.09	0.16
11,208.00	88.62	180.08	8,974.67	-2,173.54	-164.25	2,172.59	93.00	180.61	1.16
11,301.00	89.41	180.08	8,976.27	-2,266.53	-164.38	2,265.58	93.00	180.08	0.85
11,394.00	89.93	180.69	8,976.80	-2,359.52	-165.00	2,358.57	93.00	180.39	0.86
11,486.00	89.45	179.02	8,977.30	-2,451.52	-164.77	2,450.56	92.00	179.86	1.89
11,578.00	89.93	178.76	8,977.80	-2,543.50	-162.99	2,542.55	92.00	178.89	0.59
11,671.00	90.37	179.02	8,977.55	-2,636.48	-161.19	2,635.54	93.00	178.89	0.55
11,766.00	91.52	179.38	8,975.99	-2,731.46	-159.86	2,730.52	95.00	179.20	1.27
11,860.00	90.37	178.50	8,974.44	-2,825.43	-158.12	2,824.50	94.00	178.94	1.54
11,955.00	89.45	178.41	8,974.59	-2,920.39	-155.56	2,919.48	95.00	178.46	0.97
12,049.00	90.15	178.85	8,974.91	-3,014.36	-153.31	3,013.46	94.00	178.63	0.88
12,144.00	90.51	179.11	8,974.37	-3,109.35	-151.62	3,108.45	95.00	178.98	0.47
12,239.00	90.77	179.20	8,973.31	-3,204.33	-150.22	3,203.44	95.00	179.15	0.29
12,333.00	92.04	179.46	8,971.00	-3,298.29	-149.12	3,297.41	94.00	179.33	1.38
12,427.00	89.76	179.99	8,969.53	-3,392.27	-148.67	3,391.39	94.00	179.73	2.49
12,522.00	89.45	180.08	8,970.18	-3,487.27	-148.73	3,486.39	95.00	180.03	0.34
12,617.00	89.67	180.25	8,970.91	-3,582.27	-149.00	3,581.38	95.00	180.17	0.29



Wellbenders
End Of Well Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well #514H
Project:	Eddy Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Site:	Tomb Raider 1-12 Fed	MD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Well:	#514H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)	
12,711.00	90.02	180.25	8,971.16	-3,676.27	-149.41	3,675.37	94.00	180.25	0.37	
12,806.00	89.76	180.25	8,971.35	-3,771.27	-149.83	3,770.37	95.00	180.25	0.27	
12,900.00	89.98	180.17	8,971.56	-3,865.26	-150.17	3,864.37	94.00	180.21	0.25	
12,994.00	90.02	179.99	8,971.56	-3,959.26	-150.30	3,958.36	94.00	180.08	0.20	
13,089.00	90.07	180.17	8,971.48	-4,054.26	-150.43	4,053.36	95.00	180.08	0.20	
13,183.00	90.11	180.69	8,971.34	-4,148.26	-151.14	4,147.35	94.00	180.43	0.55	
13,278.00	88.57	178.32	8,972.43	-4,243.24	-150.32	4,242.34	95.00	179.51	2.97	
13,372.00	88.66	177.88	8,974.70	-4,337.16	-147.20	4,336.27	94.00	178.10	0.48	
13,467.00	89.45	178.06	8,976.27	-4,432.09	-143.84	4,431.22	95.00	177.97	0.85	
13,562.00	89.14	177.88	8,977.44	-4,527.02	-140.47	4,526.17	95.00	177.97	0.38	
13,657.00	90.46	178.50	8,977.77	-4,621.97	-137.47	4,621.13	95.00	178.19	1.54	
13,751.00	90.99	178.67	8,976.58	-4,715.93	-135.15	4,715.11	94.00	178.58	0.59	
13,846.00	91.56	178.76	8,974.47	-4,810.89	-133.02	4,810.07	95.00	178.71	0.61	
13,941.00	89.93	179.20	8,973.23	-4,905.86	-131.33	4,905.05	95.00	178.98	1.78	
14,035.00	90.07	179.55	8,973.23	-4,999.85	-130.31	4,999.05	94.00	179.37	0.40	
14,129.00	90.77	179.38	8,972.54	-5,093.85	-129.43	5,093.05	94.00	179.47	0.77	
14,223.00	91.52	179.29	8,970.67	-5,187.82	-128.34	5,187.02	94.00	179.34	0.80	
14,318.00	90.02	179.99	8,969.39	-5,282.81	-127.74	5,282.01	95.00	179.64	1.74	
14,412.00	89.85	179.55	8,969.50	-5,376.81	-127.36	5,376.01	94.00	179.77	0.50	
14,507.00	90.73	179.81	8,969.01	-5,471.80	-126.83	5,471.01	95.00	179.68	0.97	
14,601.00	91.52	179.64	8,967.17	-5,565.78	-126.38	5,564.99	94.00	179.73	0.86	
14,696.00	90.64	179.90	8,965.38	-5,660.76	-126.00	5,659.97	95.00	179.77	0.97	
14,791.00	90.68	179.73	8,964.28	-5,755.76	-125.70	5,754.97	95.00	179.82	0.18	
14,885.00	89.41	179.73	8,964.21	-5,849.75	-125.25	5,848.96	94.00	179.73	1.35	
14,980.00	89.32	179.99	8,965.26	-5,944.75	-125.02	5,943.96	95.00	179.86	0.29	
15,074.00	89.23	179.99	8,966.45	-6,038.74	-125.00	6,037.95	94.00	179.99	0.10	
15,169.00	91.08	179.90	8,966.20	-6,133.74	-124.91	6,132.94	95.00	179.95	1.95	



Wellbenders
End Of Well Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well #514H
Project:	Eddy Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Site:	Tomb Raider 1-12 Fed	MD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Well:	#514H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)	
15,264.00	91.69	179.73	8,963.90	-6,228.71	-124.61	6,227.91	95.00	179.82	0.67	
15,358.00	91.78	179.55	8,961.05	-6,322.66	-124.02	6,321.87	94.00	179.64	0.21	
15,453.00	92.79	179.81	8,957.27	-6,417.58	-123.49	6,416.79	95.00	179.68	1.10	
15,548.00	92.13	180.08	8,953.19	-6,512.50	-123.39	6,511.71	95.00	179.95	0.75	
15,642.00	92.88	180.08	8,949.08	-6,606.41	-123.53	6,605.61	94.00	180.08	0.80	
15,736.00	91.78	180.08	8,945.26	-6,700.33	-123.66	6,699.53	94.00	180.08	1.17	
15,831.00	90.33	179.99	8,943.51	-6,795.31	-123.71	6,794.51	95.00	180.03	1.53	
15,925.00	91.03	180.08	8,942.39	-6,889.30	-123.77	6,888.50	94.00	180.03	0.75	
16,020.00	90.02	180.34	8,941.52	-6,984.29	-124.12	6,983.49	95.00	180.21	1.10	
16,115.00	89.98	180.25	8,941.52	-7,079.29	-124.61	7,078.49	95.00	180.29	0.10	
16,209.00	91.12	180.52	8,940.62	-7,173.29	-125.24	7,172.47	94.00	180.38	1.25	
16,304.00	90.55	181.13	8,939.24	-7,268.26	-126.61	7,267.44	95.00	180.83	0.88	
16,399.00	90.42	181.22	8,938.43	-7,363.24	-128.56	7,362.41	95.00	181.18	0.17	
16,493.00	92.22	181.31	8,936.27	-7,457.19	-130.63	7,456.34	94.00	181.26	1.92	
16,588.00	92.26	179.90	8,932.55	-7,552.11	-131.63	7,551.26	95.00	180.61	1.48	
16,683.00	90.95	178.94	8,929.89	-7,647.06	-130.67	7,646.21	95.00	179.42	1.71	
16,777.00	90.11	179.11	8,929.02	-7,741.05	-129.07	7,740.20	94.00	179.03	0.91	
16,871.00	90.86	179.64	8,928.23	-7,835.04	-128.05	7,834.20	94.00	179.37	0.98	
16,967.00	90.37	179.55	8,927.20	-7,931.03	-127.37	7,930.19	96.00	179.59	0.52	
17,061.00	91.52	179.64	8,925.65	-8,025.01	-126.70	8,024.18	94.00	179.59	1.23	
17,156.00	90.24	179.29	8,924.19	-8,119.99	-125.82	8,119.16	95.00	179.46	1.40	
17,250.00	88.62	179.55	8,925.12	-8,213.98	-124.87	8,213.15	94.00	179.42	1.75	
17,345.00	89.32	179.73	8,926.83	-8,308.96	-124.27	8,308.14	95.00	179.64	0.76	
17,439.00	90.46	180.43	8,927.01	-8,402.96	-124.40	8,402.13	94.00	180.08	1.42	
17,534.00	89.45	180.61	8,927.09	-8,497.95	-125.26	8,497.12	95.00	180.52	1.08	
17,629.00	89.27	179.11	8,928.15	-8,592.95	-125.03	8,592.11	95.00	179.86	1.59	
17,723.00	90.64	179.38	8,928.22	-8,686.94	-123.79	8,686.11	94.00	179.25	1.49	



Wellbenders
End Of Well Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well #514H
Project:	Eddy Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Site:	Tomb Raider 1-12 Fed	MD Reference:	RKB=30' @ 3505.70usft (Cactus 108)
Well:	#514H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
17,817.00	90.02	179.02	8,927.68	-8,780.92	-122.48	8,780.10	94.00	179.20	0.76
17,911.00	90.73	178.32	8,927.06	-8,874.90	-120.30	8,874.08	94.00	178.67	1.06
18,006.00	91.38	177.35	8,925.31	-8,969.81	-116.71	8,969.02	95.00	177.84	1.23
18,100.00	90.11	177.53	8,924.09	-9,063.71	-112.51	9,062.94	94.00	177.44	1.36
18,195.00	89.01	177.79	8,924.82	-9,158.62	-108.63	9,157.87	95.00	177.66	1.19
18,291.00	89.49	177.53	8,926.08	-9,254.53	-104.71	9,253.80	96.00	177.66	0.57
18,386.00	89.45	176.91	8,926.96	-9,349.42	-100.11	9,348.71	95.00	177.22	0.65
18,480.00	87.47	179.38	8,929.48	-9,443.32	-97.06	9,442.63	94.00	178.14	3.37
18,575.00	87.25	178.14	8,933.86	-9,538.20	-95.01	9,537.52	95.00	178.76	1.32
18,670.00	87.25	177.97	8,938.42	-9,633.03	-91.79	9,632.37	95.00	178.06	0.18
18,764.00	87.52	178.06	8,942.71	-9,726.88	-88.54	9,726.23	94.00	178.02	0.30
18,859.00	89.71	178.23	8,945.00	-9,821.80	-85.46	9,821.17	95.00	178.15	2.31
18,953.00	91.16	179.29	8,944.29	-9,915.77	-83.43	9,915.15	94.00	178.76	1.91
19,048.00	91.52	179.20	8,942.07	-10,010.73	-82.18	10,010.12	95.00	179.25	0.39
19,142.00	91.82	179.99	8,939.33	-10,104.69	-81.51	10,104.08	94.00	179.59	0.90
19,191.00	92.22	180.96	8,937.60	-10,153.66	-81.92	10,153.04	49.00	180.47	2.14
19,262.00	92.22	180.96	8,934.85	-10,224.59	-83.11	10,223.97	71.00	180.96	0.00
Final Station Closure Distance= 10224.93 /Direction= 180.47 - Projection to Bit: 19262.00' MD/ 8934.85' TVD - TD: Latitude = 32.311625 / Longitude = -103.731067 - TD: Y= 477624.14 / X= 727400.23									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
19,262.00	8,934.85	-10,224.59	-83.11	Final Station Closure Distance= 10224.93 /Direction= 180.47
19,262.00	8,934.85	-10,224.59	-83.11	Projection to Bit: 19262.00' MD/ 8934.85' TVD
19,262.00	8,934.85	-10,224.59	-83.11	TD: Latitude = 32.311625 / Longitude = -103.731067
19,262.00	8,934.85	-10,224.59	-83.11	TD: Y= 477624.14 / X= 727400.23



Wellbenders
End Of Well Report



Company: Devon Energy	Local Co-ordinate Reference: Well #514H
Project: Eddy Co., NM (Nad83 - East Zone)	TVD Reference: RKB=30' @ 3505.70usft (Cactus 108)
Site: Tomb Raider 1-12 Fed	MD Reference: RKB=30' @ 3505.70usft (Cactus 108)
Well: #514H	North Reference: Grid
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: WBDS_SQL_2

Checked By: _____ Approved By: _____ Date: _____