

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
- ☐ Applicable Order (NSL, NSP, Other _____)
- ☐ Deviation Survey for Vertical Wells
- ☒ Directional Survey
 - ☒ C-102 (As-Drilled Plat for Horizontal Well)

New Well and Recompleted Well Only

- ☒ C-103 Completion Sundry (or BLM equivalent) *approved BLM Copy*
- ☒ C-105 Completion Report (or BLM equivalent)
- ☐ All Logs Run on Well

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised August 1, 2011

RECEIVED

SEP 12 2019

Submit one copy to the appropriate District Office

DISTRICT II-ARTESIA

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Devon Energy Production Company, L.P. 333 West Sheridan, Oklahoma City, OK 73102		² OGRID Number 6137
		³ Reason for Filing Code/ Effective Date NW / 8/7/19
⁴ API Number 3001545276	⁵ Pool Name LIVINGSTON RIDGE; BONE SPRING	⁶ Pool Code 39350
⁷ Property Code	⁸ Property Name BELLOQ 11-2 FED STATE COM	⁹ Well Number 223H

II. 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
P	11	23S	31E		500	South	730	East	EDDY

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	2	23S	31E		35	North	1753	East	EDDY
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 8/7/19	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
036785	DCP Midstream P.O. Box 50020 Midland, TX 79710-0020	Gas
320009	EnLink Midstream Operating, LP 2501 Cedar Springs Road, Suite 100, Dallas, TX 75201	Oil
371960	Lucid Energy Delaware, LLC 3100 McKinnon St., Ste. 800, Dallas, TX 75201	Gas

IV. Well Completion Data

²¹ Spud Date 3/12/19	²² Ready Date 8/7/19	²³ TD 20526	²⁴ PBDT 20262	²⁵ Perforations 10714 - 20376	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size *	²⁹ Depth Set	³⁰ Sacks Cement		
17-1/2"	13-3/8"	823.3	865		
12-1/4"	9-5/8"	4313.8	1454		
8-3/4"	5-1/2"	10998			
8-1/2"	5-1/2"	20511	2633		

V. Well Test Data

Tubing:

³¹ Date New Oil 8/7/19	³² Gas Delivery Date 8/7/19	³³ Test Date 8/18/19	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure 0 psi	³⁶ Csg. Pressure 0 psi
³⁷ Choke Size	³⁸ Oil 2135 bbl	³⁹ Water 4783 bbl	⁴⁰ Gas 2351 mcf		⁴¹ Test Method

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

Jenny Harms

Title:

Regulatory Analyst

E-mail Address:

Jenny.Harms@dmn.com

Date:

9/11/2019

Phone:

405-552-6560

OIL CONSERVATION DIVISION

Approve

Title:

Approval

DENIED

See Attached Cover Sheet

* Add tbg type; Amend C-104

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

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DISTRICT II-ARTESIA

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 30-015-5276	² Pool Code 39350	³ Pool Name Livingston Ridge; Bone Spring
⁴ Property Code	⁵ Property Name BELLOQ 11-2 FED STATE COM	⁶ Well Number 223H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3487.1

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
P	11	23 S	31 E		500	SOUTH	730	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
2	2	23 S	31 E		35	NORTH	1753	EAST	EDDY

¹² Dedicated Acres 320	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. 2 LAT. = 32.3407356°N LONG. = 103.7571603°W NMSP EAST (FT) N = 488170.26 E = 719281.88 W/4 CORNER SEC. 2 LAT. = 32.3335234°N LONG. = 103.7571441°W NMSP EAST (FT) N = 485546.51 E = 719301.00 SECTION CORNER LAT. = 32.3262643°N LONG. = 103.7571278°W NMSP EAST (FT) N = 482905.72 E = 719320.25 W/4 CORNER SEC. 11 LAT. = 32.3190067°N LONG. = 103.7571257°W NMSP EAST (FT) N = 480265.44 E = 719335.09 SW CORNER SEC. 11 LAT. = 32.3117463°N LONG. = 103.7571237°W NMSP EAST (FT) N = 477624.13 E = 719349.92	N/4 CORNER SEC. 2 SCALED LOT 4 LOT 3 LOT 2 LOT 1 LAST TAKE POINT 185' FSL, 1746' FEL LAT. = 32.3402197°N LONG. = 103.7457077°W NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID-(NAD83)- BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. ELEVATION VALUES ARE NAVD88. QUARTER CORNER LAT. = 32.3262353°N LONG. = 103.7485656°W 589'55'23"W 2645.45 FT NMSP EAST (FT) N = 482909.48 E = 721965.08 589'51'18"W 2639.71 FT 589'53'07"W 2643.10 FT	NE CORNER SEC. 2 LAT. = 32.3407245°N LONG. = 103.7400556°W NMSP EAST (FT) N = 488195.03 E = 724564.59 E/4 CORNER SEC. 2 LAT. = 32.3334649°N LONG. = 103.7400345°W NMSP EAST (FT) N = 485554.08 E = 724585.72 SECTION CORNER LAT. = 32.3262057°N LONG. = 103.7400123°W NMSP EAST (FT) N = 482913.26 E = 724607.20 E/4 CORNER SEC. 11 LAT. = 32.3189531°N LONG. = 103.7400200°W NMSP EAST (FT) N = 480274.75 E = 724619.44 SE CORNER SEC. 11 LAT. = 32.3116999°N LONG. = 103.7400280°W NMSP EAST (FT) N = 477636.10 E = 724631.57	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. 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. AUGUST 22, 2019 Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Certificate Number _____ NEW MEXICO PROFESSIONAL SURVEYOR 12797 SURVEY NO. 6188B
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Intent ☐ As Drilled ☒ XX

SEP 12 2019

API #
300-15-45276Operator Name:
DEVON ENERGY PRODUCTION
COMPANY, L.P.Property Name:
BELLOQ 11-2 FED STATE COM

DISTRICT 11-ARTESIA O.C.D.

Well Number
223H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	11	23S	31E		227	SOUTH	1660	EAST	EDDY
Latitude					Longitude				NAD
32.3123404					103.7453989				83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	11	23S	31E		772	SOUTH	1660	EAST	EDDY
Latitude					Longitude				NAD
32.3136989					103.7453991				83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	2	23S	31E	2	185	NORTH	1746	EAST	EDDY
Latitude					Longitude				NAD
32.3402197					103.7457077				83

Is this well the defining well for the Horizontal Spacing Unit? ☒ yesIs 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

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SEP 12 2019

DISTRICT ARTESADO

DEVON

SURVEY REPORT

BELLOQ 11-2 FED STATE COM #223H

H&P 466

3/12/2019

This survey is correct to the best of my knowledge and is supported by actual field data.

Garrett Sengholz

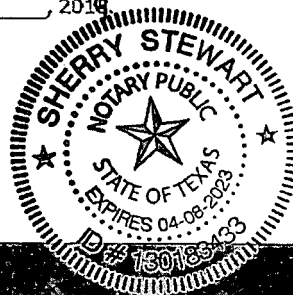
Notarized this date 16th of August, 2019

Sherry Stewart

Notary Signature

County of Midland

State of Texas



The Ultimate Partner In Wellbore Placement

SURVEY REPORT

BELLOQ 11-2 FED STATE COM #223H COMPUTED

CUSTOMER	DEVON	SDI JOB NO.	OP:017751
PROJECT	BELLOQ 11-2 FED STATE COM #223H	SDI DISTRICT	Midland
FIELD	2nd BSSS	SDI KIT/UNIT	KIT MUD PULSE
DEFINITIVE SURVEY	Computed Surveys		

SITE INFORMATION

Site Name	BELLOQ 11-2 FED STATE COM #223H	Section	-
Lat/Long	32° 18' 45.241" N, 103° 45' 20.053" W	Township	-
Northing	477,925.32 ft	Range	-
Easting	719,828.19 ft		

MAP INFORMATION

North Reference	Grid North
Grid Correction	-0.31 deg
System	US State Plane 1983
Datum	North American Datum 1983 (GRS 1980)
Map Zone	New Mexico East: 3001

**WELL INFORMATION**

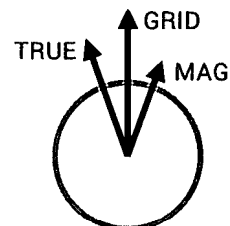
Lat/Long	32° 18' 47.092" N, 103° 44' 32.6" W
Northing	478,134.54 ft
Easting	723,899.43 ft
UWI	30-015-45276

DEPTH AND ELEVATION REFERENCE

Ground Level	3487 ft above Mean Sea Level
Reference Datum	RKB
Reference Height	25.5 ft above G.L.
Reference Elevation	3512.5 ft

VERTICAL SECTION REFERENCE

+N/-S	0 ft
+E/-W	0 ft
Proposal Direction	353.83°
Calculation Method	Minimum Curvature

**GEOMAGNETIC REFERENCE INFORMATION**

Local Gravity: 998.500 mG [computed]

MD	MODEL	DATE	DECLINATION	TRUE TO GRID	MAG TO GRID
0-20526 ft	HDGM2018	11 Mar 2019	6.83°	subtract 0.31°	add 6.52°

WELL NOTES

Survey at 20526' is a PTB

OPERATORS

Bryan Rose , Daniel Ferguson, DEVON, Erick Robles

SDI Operator Name (Printed)

SIGNATURE

DATE

MD	INC	AZIM	TVD	VS	+N/S	+E/W	DLS	CLOSURE	CLOSURE
ft	deg	deg	ft	ft	ft	ft	%/100ft	DIST	DIR
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
115.00	0.94	264.56	114.99	0.01	-0.09	-0.94	0.82	0.95	264.56
208.00	0.91	254.55	207.98	-0.10	-0.36	-2.42	0.18	2.44	261.54
330.00	1.59	249.14	329.95	-0.68	-1.22	-4.94	0.57	5.09	256.10
421.00	1.49	264.34	420.92	-1.00	-1.79	-7.30	0.46	7.52	256.22
514.00	1.71	265.65	513.88	-0.94	-2.01	-9.89	0.24	10.09	258.49
607.00	1.66	266.70	606.84	-0.83	-2.20	-12.62	0.06	12.81	260.12
700.00	1.35	261.50	699.81	-0.81	-2.44	-15.05	0.37	15.25	260.80
760.00	1.29	259.20	759.80	-0.89	-2.67	-16.42	0.13	16.64	260.77
885.00	1.10	267.47	884.77	-0.93	-2.99	-19.00	0.21	19.24	261.07
977.00	1.03	266.34	976.75	-0.83	-3.08	-20.71	0.08	20.94	261.55
1069.00	0.92	266.17	1068.74	-0.77	-3.18	-22.28	0.12	22.51	261.88
1161.00	0.77	257.43	1160.73	-0.81	-3.36	-23.62	0.22	23.86	261.89
1254.00	0.90	258.63	1253.72	-0.94	-3.64	-24.95	0.15	25.21	261.69
1346.00	0.71	248.71	1345.71	-1.16	-3.99	-26.19	0.26	26.49	261.33
1438.00	0.74	246.33	1437.70	-1.48	-4.44	-27.27	0.04	27.62	260.75
1529.00	1.58	266.24	1528.68	-1.61	-4.76	-29.05	1.01	29.44	260.70
1623.00	3.35	265.06	1622.59	-1.49	-5.08	-33.07	1.88	33.46	261.27
1717.00	5.18	261.53	1716.33	-1.61	-5.94	-40.01	1.97	40.44	261.55
1811.00	6.90	257.29	1809.80	-2.42	-7.81	-49.71	1.89	50.32	261.07
1906.00	8.52	254.93	1903.94	-4.16	-10.89	-62.08	1.73	63.03	260.05
2000.00	9.93	254.26	1996.72	-6.58	-14.90	-76.60	1.50	78.04	258.99
2094.00	10.39	253.94	2089.25	-9.39	-19.45	-92.55	0.50	94.57	258.13
2188.00	10.52	254.03	2181.69	-12.30	-24.15	-108.94	0.14	111.58	257.50
2283.00	10.57	253.23	2275.09	-15.38	-29.05	-125.61	0.16	128.93	256.98
2377.00	10.71	253.99	2367.47	-18.46	-33.95	-142.27	0.22	146.26	256.58
2471.00	10.12	252.36	2459.92	-21.59	-38.86	-158.53	0.70	163.23	256.23
2565.00	10.09	252.10	2552.46	-24.91	-43.89	-174.24	0.06	179.69	255.86
2660.00	10.15	252.71	2645.98	-28.22	-48.94	-190.16	0.13	196.35	255.57
2754.00	10.03	254.11	2738.53	-31.19	-53.64	-205.93	0.29	212.80	255.40
2849.00	9.88	254.00	2832.10	-33.98	-58.15	-221.72	0.16	229.22	255.30
2943.00	9.64	254.96	2924.74	-36.57	-62.42	-237.08	0.31	245.15	255.25

MD	INC	AZIM	TVD	VS	+N/S	+E/W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
3037.00	9.92	256.98	3017.37	-38.75	-66.28	-252.57	0.47	261.12	255.30
3132.00	10.01	255.31	3110.94	-40.95	-70.22	-268.52	0.32	277.55	255.35
3226.00	9.77	256.06	3203.54	-43.24	-74.21	-284.17	0.29	293.70	255.36
3320.00	10.58	255.33	3296.06	-45.59	-78.32	-300.26	0.87	310.31	255.38
3414.00	10.59	254.66	3388.47	-48.25	-82.79	-316.94	0.13	327.58	255.36
3509.00	10.23	255.19	3481.90	-50.91	-87.26	-333.51	0.39	344.74	255.34
3603.00	9.63	254.19	3574.49	-53.47	-91.53	-349.14	0.67	360.94	255.31
3697.00	9.70	253.25	3667.16	-56.24	-95.95	-364.29	0.19	376.71	255.24
3792.00	10.36	249.51	3760.71	-59.83	-101.25	-379.96	0.97	393.22	255.08
3886.00	10.01	247.68	3853.23	-64.19	-107.31	-395.43	0.51	409.73	254.82
3980.00	9.52	248.32	3945.87	-68.54	-113.28	-410.21	0.53	425.56	254.56
4075.00	9.95	249.85	4039.50	-72.62	-119.01	-425.22	0.53	441.56	254.36
4169.00	10.79	255.04	4131.96	-75.93	-124.08	-441.34	1.33	458.45	254.30
4263.00	10.28	255.41	4224.38	-78.50	-128.47	-457.95	0.54	475.63	254.33
4348.00	9.98	255.13	4308.06	-80.73	-132.27	-472.41	0.36	490.57	254.36
4442.00	9.70	253.78	4400.67	-83.34	-136.57	-487.88	0.39	506.64	254.36
4537.00	10.47	253.21	4494.20	-86.33	-141.30	-503.83	0.82	523.27	254.33
4631.00	11.18	251.61	4586.53	-89.83	-146.64	-520.66	0.82	540.92	254.27
4725.00	11.59	251.00	4678.68	-93.86	-152.59	-538.24	0.46	559.46	254.17
4819.00	10.42	250.56	4770.95	-97.91	-158.50	-555.19	1.25	577.38	254.07
4913.00	10.35	249.79	4863.41	-101.91	-164.25	-571.14	0.16	594.29	253.96
5008.00	10.26	248.06	4956.87	-106.28	-170.36	-587.00	0.34	611.22	253.82
5103.00	10.24	252.80	5050.36	-110.19	-176.01	-602.91	0.89	628.08	253.73
5197.00	10.69	253.22	5142.80	-113.40	-181.00	-619.24	0.48	645.15	253.71
5291.00	9.63	252.20	5235.32	-116.59	-185.92	-635.07	1.13	661.73	253.68
5385.00	8.93	250.07	5328.09	-119.91	-190.82	-649.42	0.83	676.87	253.63
5480.00	8.79	249.43	5421.96	-123.47	-195.88	-663.15	0.18	691.48	253.54
5574.00	9.38	250.94	5514.78	-126.97	-200.91	-677.12	0.67	706.30	253.47
5668.00	9.42	251.70	5607.51	-130.29	-205.83	-691.66	0.14	721.64	253.43
5763.00	9.59	251.55	5701.21	-133.61	-210.77	-706.55	0.19	737.32	253.39
5857.00	9.67	250.23	5793.88	-137.13	-215.92	-721.41	0.25	753.03	253.34
5952.00	9.73	249.75	5887.53	-140.96	-221.40	-736.45	0.11	769.01	253.27

SURVEY REPORT

BELLOQ 11-2 FED STATE COM #223H COMPUTED

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/S ft	+E/W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
6046.00	9.62	249.39	5980.19	-144.85	-226.91	-751.25	0.13	784.77	253.19
6140.00	10.01	253.16	6072.82	-148.32	-232.04	-766.41	0.80	800.77	253.16
6235.00	9.87	253.63	6166.39	-151.29	-236.73	-782.12	0.17	817.16	253.16
6329.00	9.66	252.93	6259.03	-154.21	-241.31	-797.39	0.25	833.11	253.16
6424.00	9.70	251.89	6352.68	-157.38	-246.14	-812.63	0.19	849.09	253.15
6518.00	10.16	250.90	6445.27	-160.87	-251.32	-827.99	0.52	865.29	253.12
6612.00	10.02	250.49	6537.81	-164.61	-256.76	-843.53	0.17	881.74	253.07
6707.00	9.70	249.00	6631.41	-168.56	-262.38	-858.78	0.43	897.97	253.01
6801.00	9.97	248.38	6724.03	-172.76	-268.22	-873.74	0.32	913.98	252.93
6896.00	8.52	252.11	6817.79	-176.38	-273.41	-888.09	1.65	929.22	252.89
6990.00	6.81	257.04	6910.95	-178.45	-276.81	-900.15	1.95	941.75	252.91
7084.00	4.74	257.80	7004.47	-179.52	-278.88	-909.38	2.21	951.18	252.95
7178.00	2.81	248.49	7098.26	-180.54	-280.54	-915.32	2.14	957.35	252.96
7272.00	1.50	235.47	7192.19	-181.74	-282.09	-918.48	1.48	960.82	252.93
7367.00	0.78	218.87	7287.17	-182.79	-283.30	-919.92	0.83	962.55	252.88
7461.00	0.78	215.20	7381.16	-183.72	-284.32	-920.69	0.05	963.59	252.84
7555.00	0.76	210.77	7475.16	-184.70	-285.38	-921.38	0.07	964.56	252.79
7649.00	0.76	204.96	7569.15	-185.73	-286.48	-921.96	0.08	965.44	252.74
7744.00	0.93	209.70	7664.14	-186.90	-287.73	-922.61	0.19	966.43	252.68
7838.00	0.47	356.08	7758.13	-187.13	-288.01	-923.01	1.43	966.90	252.67
7932.00	1.58	5.90	7852.12	-185.48	-286.33	-922.90	1.20	966.30	252.76
8026.00	1.64	5.27	7946.08	-182.89	-283.70	-922.65	0.06	965.28	252.91
8121.00	1.39	3.54	8041.05	-180.42	-281.20	-922.45	0.26	964.36	253.05
8215.00	1.06	356.28	8135.03	-178.43	-279.19	-922.43	0.39	963.76	253.16
8309.00	0.75	339.55	8229.01	-176.96	-277.74	-922.71	0.43	963.60	253.25
8404.00	0.74	322.02	8324.01	-175.83	-276.67	-923.31	0.24	963.87	253.32
8498.00	1.08	296.01	8417.99	-174.84	-275.80	-924.48	0.56	964.74	253.39
8593.00	1.17	291.33	8512.98	-173.91	-275.05	-926.19	0.14	966.17	253.46
8687.00	1.02	276.93	8606.96	-173.27	-274.60	-927.92	0.33	967.70	253.52
8781.00	0.87	324.72	8700.95	-172.46	-273.91	-929.16	0.83	968.70	253.57
8876.00	1.96	353.41	8795.92	-170.20	-271.71	-929.77	1.34	968.66	253.71
8970.00	1.48	37.01	8889.88	-167.71	-269.14	-929.22	1.44	967.42	253.85

MD	INC	AZIM	TVD	VS	+N/S	+E/W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
9064.00	1.24	66.92	8983.85	-166.53	-267.77	-927.56	0.78	965.44	253.90
9158.00	0.94	88.51	9077.84	-166.30	-267.35	-925.85	0.54	963.68	253.89
9252.00	0.64	125.58	9171.83	-166.71	-267.64	-924.64	0.61	962.60	253.86
9347.00	0.68	192.64	9266.82	-167.60	-268.50	-924.33	0.77	962.54	253.80
9441.00	1.65	212.72	9360.80	-169.18	-270.18	-925.19	1.10	963.83	253.72
9535.00	1.97	219.93	9454.76	-171.35	-272.56	-926.95	0.42	966.19	253.61
9629.00	1.71	219.66	9548.71	-173.45	-274.88	-928.89	0.28	968.70	253.52
9723.00	1.57	232.78	9642.67	-175.09	-276.73	-930.81	0.42	971.07	253.44
9817.00	1.83	229.92	9736.63	-176.59	-278.48	-932.99	0.29	973.66	253.38
9912.00	3.20	322.34	9831.56	-175.18	-277.36	-935.77	3.96	976.01	253.49
10006.00	13.41	5.32	9924.51	-162.21	-264.39	-936.37	11.99	972.98	254.23
10053.00	20.56	7.71	9969.43	-148.84	-250.76	-934.76	15.28	967.81	254.98
10100.00	26.44	6.32	10012.51	-130.60	-232.17	-932.50	12.56	960.96	256.02
10147.00	30.68	359.80	10053.80	-108.45	-209.77	-931.38	11.20	954.71	257.31
10195.00	33.85	356.91	10094.38	-82.91	-184.16	-932.15	7.34	950.17	258.82
10242.00	37.22	358.61	10132.63	-55.67	-156.87	-933.20	7.47	946.29	260.46
10289.00	39.65	0.70	10169.44	-26.61	-127.66	-933.36	5.86	942.05	262.21
10336.00	44.12	2.43	10204.42	4.47	-96.31	-932.48	9.82	937.44	264.10
10384.00	47.80	359.91	10237.79	38.69	-61.82	-931.80	8.54	933.85	266.20
10436.00	50.49	0.17	10271.80	77.78	-22.49	-931.77	5.18	932.04	268.62
10478.00	54.35	0.69	10297.41	110.84	-10.78	-931.52	9.25	931.58	270.66
10525.00	57.86	359.28	10323.62	149.62	49.79	-931.54	7.87	932.87	273.06
10572.00	60.46	359.10	10347.71	189.79	90.13	-932.11	5.55	936.45	275.52
10619.00	64.03	359.51	10369.60	231.19	131.72	-932.61	7.62	941.87	278.04
10667.00	68.18	0.78	10389.04	274.80	175.59	-932.49	8.98	948.88	280.66
10714.00	71.34	1.87	10405.30	318.51	219.67	-931.47	7.06	957.02	283.27
10761.00	71.95	2.17	10420.10	362.66	264.25	-929.90	1.45	966.72	285.86
10808.00	75.07	1.75	10433.44	407.27	309.29	-928.36	6.69	978.52	288.43
10855.00	80.05	1.02	10443.56	452.76	355.15	-927.25	10.70	992.94	290.96
10902.00	86.00	359.85	10449.26	499.08	401.78	-926.90	12.89	1010.23	293.44
10949.00	87.92	0.13	10451.75	545.74	448.71	-926.91	4.13	1029.81	295.83
11011.00	90.50	359.49	10452.61	607.39	510.70	-927.11	4.30	1058.47	298.85

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/S ft	+E/W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
11102.00	90.10	359.17	10452.13	697.97	601.70	-928.18	0.57	1106.15	302.95
11195.00	91.28	359.85	10451.01	790.50	694.68	-928.98	1.46	1159.99	306.79
11287.00	89.30	359.72	10450.55	882.00	786.68	-929.32	2.16	1217.57	310.25
11379.00	89.36	0.13	10451.62	973.47	878.67	-929.44	0.44	1279.03	313.39
11471.00	89.70	0.34	10452.38	1064.90	970.67	-929.06	0.44	1343.63	316.25
11563.00	90.20	0.30	10452.46	1156.31	1062.66	-928.54	0.55	1411.19	318.85
11655.00	91.21	1.52	10451.33	1247.60	1154.64	-927.08	1.72	1480.77	321.24
11747.00	89.60	359.68	10450.68	1338.95	1246.63	-926.12	2.66	1552.99	323.39
11840.00	89.93	359.63	10451.06	1431.46	1339.63	-926.68	0.37	1628.91	325.33
11932.00	90.71	358.51	10450.55	1523.08	1431.61	-928.18	1.48	1706.17	327.04
12024.00	89.19	358.09	10450.63	1614.79	1523.57	-930.91	1.71	1785.45	328.57
12115.00	87.75	357.62	10453.06	1705.53	1614.47	-934.32	1.67	1865.33	329.94
12207.00	87.75	357.68	10456.67	1797.26	1706.32	-938.09	0.06	1947.19	331.20
12301.00	88.15	357.55	10460.04	1890.99	1800.18	-941.99	0.45	2031.75	332.38
12396.00	88.19	357.44	10463.07	1985.75	1895.04	-946.15	0.13	2118.10	333.47
12490.00	88.56	357.67	10465.74	2079.52	1988.91	-950.16	0.46	2204.22	334.46
12585.00	89.13	357.83	10467.66	2174.27	2083.82	-953.89	0.62	2291.77	335.40
12679.00	90.44	357.54	10468.01	2268.06	2177.74	-957.69	1.43	2379.02	336.26
12773.00	91.68	357.59	10466.28	2361.84	2271.64	-961.68	1.32	2466.81	337.06
12867.00	91.68	359.94	10463.52	2455.44	2365.57	-963.70	2.51	2554.34	337.83
12962.00	89.77	0.43	10462.32	2549.85	2460.56	-963.40	2.08	2642.44	338.62
13057.00	89.53	359.96	10462.90	2644.26	2555.55	-963.07	0.55	2731.00	339.35
13151.00	90.20	359.78	10463.12	2737.74	2649.55	-963.29	0.74	2819.23	340.02
13246.00	91.08	359.79	10462.06	2832.22	2744.55	-963.64	0.92	2908.80	340.65
13340.00	90.81	358.25	10460.52	2925.82	2838.52	-965.25	1.67	2998.15	341.22
13434.00	91.04	357.96	10459.01	3019.54	2932.45	-968.36	0.39	3088.20	341.73
13529.00	89.40	357.07	10458.65	3114.34	3027.36	-972.48	1.96	3179.72	342.19
13623.00	89.39	356.66	10459.64	3208.21	3121.21	-977.62	0.44	3270.74	342.61
13717.00	89.53	356.25	10460.52	3302.10	3215.03	-983.44	0.46	3362.08	342.99
13811.00	88.76	357.39	10461.93	3395.96	3308.87	-988.66	1.46	3453.41	343.36
13905.00	89.03	357.80	10463.74	3489.74	3402.77	-992.61	0.52	3544.59	343.74
13999.00	89.36	357.91	10465.07	3583.50	3496.69	-996.12	0.38	3635.81	344.10

MD	INC	AZIM	TVD	VS	±N/S	±E/W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
14093.00	90.54	358.01	10465.15	3677.26	3590.63	-999.47	1.26	3727.14	344.45
14188.00	91.11	357.92	10463.79	3772.00	3685.56	-1002.84	0.60	3819.56	344.78
14282.00	89.90	358.10	10462.96	3865.74	3779.50	-1006.10	1.30	3911.12	345.09
14376.00	89.73	358.17	10463.26	3959.48	3873.45	-1009.16	0.19	4002.75	345.40
14471.00	89.93	358.02	10463.54	4054.21	3968.40	-1012.31	0.27	4095.48	345.69
14565.00	90.70	357.79	10463.02	4147.97	4062.33	-1015.75	0.86	4187.40	345.96
14660.00	90.67	357.14	10461.88	4242.77	4157.23	-1019.95	0.68	4280.52	346.22
14755.00	91.54	358.53	10460.04	4337.52	4252.14	-1023.54	1.73	4373.60	346.47
14849.00	89.66	359.17	10459.05	4431.15	4346.11	-1025.42	2.11	4465.45	346.72
14944.00	90.13	358.93	10459.22	4525.76	4441.10	-1027.00	0.55	4558.30	346.98
15039.00	91.04	359.99	10458.25	4620.29	4536.09	-1027.89	1.47	4651.09	347.23
15133.00	89.13	0.81	10458.11	4713.67	4630.08	-1027.24	2.22	4742.67	347.49
15228.00	89.16	0.24	10459.53	4808.01	4725.07	-1026.36	0.60	4835.25	347.74
15322.00	90.57	1.50	10459.75	4901.30	4819.05	-1024.94	2.01	4926.84	347.99
15416.00	90.54	0.30	10458.84	4994.57	4913.03	-1023.46	1.27	5018.50	348.23
15511.00	90.03	1.34	10458.36	5088.87	5008.02	-1022.10	1.21	5111.26	348.46
15605.00	88.06	1.82	10459.93	5181.99	5101.97	-1019.51	2.17	5202.83	348.70
15700.00	87.95	1.52	10463.24	5276.04	5196.87	-1016.75	0.33	5295.40	348.93
15794.00	89.26	2.20	10465.52	5369.09	5290.79	-1013.69	1.57	5387.02	349.15
15889.00	88.19	0.94	10467.64	5463.20	5385.73	-1011.09	1.75	5479.81	349.37
15983.00	88.02	1.08	10470.75	5556.41	5479.66	-1009.43	0.24	5571.86	349.56
16077.00	87.65	359.52	10474.30	5649.74	5573.59	-1008.94	1.71	5664.17	349.74
16172.00	87.75	359.27	10478.11	5744.22	5668.51	-1009.95	0.28	5757.78	349.90
16267.00	89.16	357.18	10480.67	5838.90	5763.42	-1012.90	2.66	5851.75	350.03
16362.00	90.47	356.23	10480.98	5933.78	5858.26	-1018.35	1.70	5946.11	350.14
16456.00	90.17	354.90	10480.45	6027.73	5951.97	-1025.62	1.46	6039.69	350.22
16551.00	91.11	358.23	10479.40	6122.60	6046.78	-1031.32	3.65	6134.10	350.32
16646.00	91.85	358.31	10476.95	6217.28	6141.71	-1034.18	0.78	6228.17	350.44
16741.00	92.18	359.26	10473.61	6311.87	6236.63	-1036.20	1.06	6322.12	350.57
16835.00	92.65	359.11	10469.64	6405.37	6330.53	-1037.53	0.53	6414.99	350.69
16929.00	90.94	359.94	10466.69	6498.86	6424.48	-1038.30	2.03	6507.84	350.82
17023.00	90.97	359.48	10465.12	6592.35	6518.46	-1038.78	0.49	6600.72	350.95

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/S ft	+E/W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
17117.00	91.34	1.40	10463.22	6685.70	6612.44	-1038.06	2.08	6693.42	351.08
17212.00	91.71	2.19	10460.69	6779.75	6707.36	-1035.08	0.92	6786.75	351.23
17306.00	87.95	359.99	10460.97	6872.98	6801.32	-1033.29	4.63	6879.36	351.36
17401.00	89.36	0.75	10463.20	6967.33	6896.29	-1032.68	1.68	6973.18	351.48
17495.00	88.69	359.88	10464.79	7060.71	6990.27	-1032.16	1.16	7066.06	351.60
17589.00	91.24	0.51	10464.85	7154.12	7084.26	-1031.84	2.79	7159.01	351.71
17684.00	91.44	359.84	10462.62	7248.52	7179.23	-1031.55	0.74	7252.96	351.82
17778.00	91.14	359.80	10460.50	7341.98	7273.21	-1031.84	0.32	7346.04	351.93
17873.00	91.38	359.71	10458.42	7436.45	7368.18	-1032.25	0.26	7440.14	352.03
17967.00	91.75	359.68	10455.86	7529.92	7462.15	-1032.74	0.39	7533.27	352.12
18061.00	90.13	359.98	10454.31	7623.39	7556.13	-1033.02	1.74	7626.42	352.22
18156.00	90.74	359.86	10453.59	7717.85	7651.13	-1033.15	0.65	7720.57	352.31
18250.00	91.64	359.94	10451.64	7811.30	7745.11	-1033.32	0.97	7813.73	352.40
18344.00	91.61	359.04	10448.97	7904.81	7839.06	-1034.15	0.96	7906.98	352.48
18439.00	91.24	0.46	10446.61	7999.27	7934.03	-1034.57	1.54	8001.20	352.57
18533.00	89.40	0.78	10446.08	8092.60	8028.02	-1033.55	1.99	8094.28	352.66
18627.00	91.38	1.88	10445.45	8185.79	8121.99	-1031.37	2.41	8187.21	352.76
18721.00	88.66	0.36	10445.42	8279.02	8215.96	-1029.53	3.31	8280.21	352.86
18815.00	88.25	359.26	10447.95	8372.47	8309.92	-1029.84	1.24	8373.49	352.94
18910.00	88.76	359.84	10450.43	8466.96	8404.89	-1030.58	0.81	8467.83	353.01
19004.00	88.52	358.84	10452.66	8560.50	8498.85	-1031.66	1.09	8561.24	353.08
19098.00	89.23	358.77	10454.51	8654.13	8592.81	-1033.61	0.75	8654.75	353.14
19193.00	90.20	359.00	10454.98	8748.76	8687.79	-1035.46	1.05	8749.28	353.20
19287.00	90.40	359.30	10454.48	8842.35	8781.78	-1036.85	0.38	8842.78	353.27
19382.00	89.03	359.58	10454.96	8936.89	8876.77	-1037.78	1.48	8937.23	353.33
19476.00	89.70	358.95	10456.00	9030.46	8970.76	-1038.99	0.98	9030.72	353.39
19570.00	90.40	357.67	10455.92	9124.17	9064.71	-1041.76	1.55	9124.38	353.44
19665.00	89.76	357.31	10455.78	9218.98	9159.62	-1045.91	0.77	9219.14	353.49
19759.00	90.07	357.86	10455.92	9312.78	9253.54	-1049.87	0.66	9312.91	353.53
19853.00	90.23	356.90	10455.67	9406.59	9347.44	-1054.16	1.03	9406.69	353.57
19947.00	90.97	356.79	10454.68	9500.46	9441.29	-1059.33	0.79	9500.53	353.60
20042.00	91.58	357.07	10452.56	9595.29	9536.13	-1064.42	0.70	9595.35	353.63

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
20136.00	92.82	357.75	10448.96	9689.04	9629.96	-1068.66	1.51	9689.08	353.67
20230.00	93.63	357.58	10443.67	9782.68	9723.74	-1072.48	0.88	9782.70	353.71
20324.00	92.08	356.89	10438.98	9876.39	9817.51	-1077.01	1.81	9876.40	353.74
20419.00	92.11	357.15	10435.51	9971.18	9912.31	-1081.95	0.28	9971.19	353.77
20470.00	92.72	357.04	10433.36	10022.05	9963.20	-1084.53	1.20	10022.06	353.79
20526.00	92.72	357.04	10430.70	10077.90	10019.07	-1087.41	0.00	10077.90	353.81