

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 Amended 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 *Approved BLM Copy*
- ☐ 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) *Approved BLM Copy*
- ☐ All Logs Run on Well

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

RECEIVED

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

SEP 12 2019

Form C-102

Revised August 1, 2011

DISTRICT II-ARTESIA CO.

to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45278	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 234H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3486.6

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	700	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
1	2	23 S	31 E		37	NORTH	674	EAST	EDDY

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

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. = 103.7517603°W NMSP EAST (FT) N = 488170.26 E = 719281.88 W/4 CORNER SEC. 2 LAT. = 32.3335234°N LONG. = 103.7517441°W NMSP EAST (FT) N = 485546.51 E = 719301.00 SECTION CORNER LAT. = 32.3262643°N LONG. = 103.7517278°W NMSP EAST (FT) N = 482905.72 E = 719320.25 W/4 CORNER SEC. 11 LAT. = 32.3190067°N LONG. = 103.7517257°W NMSP EAST (FT) N = 480265.44 E = 719335.09 SW CORNER SEC. 11 LAT. = 32.3117463°N LONG. = 103.7517237°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 194' FSL, 872' FEL LAT. = 32.3401931°N LONG. = 103.7422285°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 NAVD83. QUARTER CORNER LAT. = 32.3262353°N LONG. = 103.7485656°W NMSP EAST (FT) N = 482909.48 E = 721965.08 SEC. 11 FIRST TAKE POINT 706' FSL, 705' FEL LAT. = 32.3136461°N LONG. = 103.7423081°W KICK OFF POINT 250' FSL, 708' FEL LAT. = 32.3123939°N LONG. = 103.7423199°W S/4 CORNER SEC. 11 LAT. = 32.3117253°N LONG. = 103.7485813°W NMSP EAST (FT) N = 477630.81 E = 721989.05 589°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. <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. AUGUST 22, 2019 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor Certificate Number: 12797 Survey No. 5225C
--	--	---	--	--	--	--

RECEIVED

Intent ☐ As Drilled ☒

SEP 12 2019

API #
300-15-45278

DISTRICT//ARTESIAO.C.D.

Operator Name:
DEVON ENERGY PRODUCTION
COMPANY, L.P.Property Name:
BELLOQ 11-2 FED STATE COMWell Number
234H

Kick Off Point (KOP)

UL P	Section 11	Township 23S	Range 31E	Lot	Feet 250	From N/S SOUTH	Feet 708	From E/W EAST	County EDDY
Latitude 32.3123939					Longitude 103.7423199			NAD 83	

First Take Point (FTP)

UL P	Section 11	Township 23S	Range 31E	Lot	Feet 706	From N/S SOUTH	Feet 705	From E/W EAST	County EDDY
Latitude 32.3136461					Longitude 103.7423081			NAD 83	

Last Take Point (LTP)

UL A	Section 2	Township 23S	Range 31E	Lot 1	Feet 194	From N/S NORTH	Feet 672	From E/W EAST	County EDDY
Latitude 32.3401931					Longitude 103.7422285			NAD 83	

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

☒ yes

Is 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

RECEIVED

SEP 12 2019

DISTRICT 7 - ARTESIA O.C.D.

DEVON

SURVEY REPORT

BELLOQ 11-2 FED STATE COM #234H

H&P 466

3/11/2019

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

Harvey J. Layton

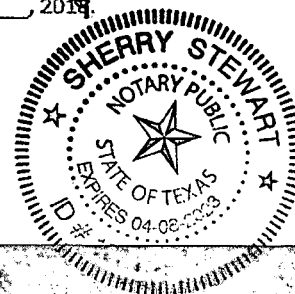
Notarized this date 16th of August, 2019.

Sherry Stewart

Notary Signature

County of Midland

State of Texas



The Ultimate Partner In Wellbore Placement

SURVEY REPORT

BELLOQ 11-2 FED STATE COM #234H COMPUTED

CUSTOMER	Devon	SDI JOB NO.	OP.017157
PROJECT	Belloq 11-2 Fed State Com #234H	SDI DISTRICT	Midland
FIELD	Bone Springs	SDI KIT/UNIT	KIT MUD PULSE

SITE INFORMATION

Site Name	Belloq 11-2 Fed State Com #234H	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**

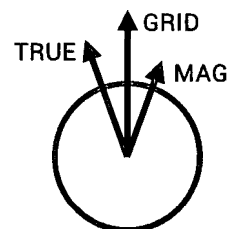
Lat/Long	32° 18' 47.091" N, 103° 44' 32.251" W
Northing	478,134.61 ft
Easting	723,929.41 ft
UWI	30-015-45278

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	359.87°
Calculation Method	Minimum Curvature

**GEOMAGNETIC REFERENCE INFORMATION**

Local Gravity: 998.500 mG [computed]

MD	MODEL	DATE	DECLINATION	TRUE TO GRID	MAG TO GRID
0-20486 ft	HDGM2018	10 Mar 2019	6.83°	subtract 0.31°	add 6.52°

WELL NOTES

Survey @ 20486' is a straight line projection to the bit

OPERATORS

D. FERGUSON, E. GLASS, J. BEARDEN

SDI Operator Name (Printed)

SIGNATURE

DATE

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
115.00	0.31	232.16	115.00	-0.19	-0.19	-0.25	0.27	0.31	232.16
239.00	0.60	236.67	239.00	-0.75	-0.75	-1.05	0.24	1.29	234.42
331.00	0.47	247.04	330.99	-1.16	-1.17	-1.80	0.18	2.15	237.13
423.00	0.59	252.93	422.99	-1.44	-1.45	-2.60	0.14	2.98	240.85
515.00	0.53	242.22	514.98	-1.78	-1.79	-3.42	0.13	3.86	242.46
607.00	0.66	258.77	606.98	-2.08	-2.09	-4.32	0.24	4.79	244.22
700.00	0.81	249.04	699.97	-2.41	-2.42	-5.46	0.21	5.97	246.05
762.00	0.70	251.00	761.97	-2.69	-2.70	-6.22	0.18	6.79	246.51
885.00	0.52	285.98	884.96	-2.78	-2.79	-7.47	0.33	7.98	249.50
977.00	0.84	295.68	976.95	-2.37	-2.39	-8.48	0.37	8.81	254.29
1068.00	0.55	300.31	1067.95	-1.86	-1.88	-9.46	0.32	9.65	258.78
1161.00	0.81	314.87	1160.94	-1.16	-1.19	-10.32	0.33	10.38	263.44
1253.00	0.62	301.48	1252.93	-0.44	-0.47	-11.20	0.28	11.21	267.61
1345.00	0.81	315.57	1344.92	0.28	0.26	-12.08	0.28	12.08	271.22
1438.00	0.74	313.16	1437.92	1.17	1.14	-12.98	0.09	13.03	275.00
1529.00	0.26	313.27	1528.91	1.71	1.67	-13.55	0.53	13.65	277.04
1621.00	0.32	348.12	1620.91	2.10	2.07	-13.75	0.20	13.91	278.54
1713.00	0.59	288.11	1712.91	2.50	2.46	-14.26	0.56	14.47	279.80
1807.00	0.47	345.67	1806.91	3.02	2.99	-14.82	0.56	15.12	281.39
1901.00	0.26	343.36	1900.90	3.59	3.56	-14.97	0.22	15.39	283.36
1995.00	0.43	289.29	1994.90	3.91	3.87	-15.36	0.37	15.84	284.15
2089.00	0.57	309.52	2088.90	4.32	4.29	-16.06	0.24	16.62	284.95
2183.00	0.42	328.36	2182.89	4.91	4.88	-16.60	0.24	17.30	286.37
2277.00	0.17	272.38	2276.89	5.21	5.17	-16.91	0.37	17.69	287.00
2372.00	0.13	260.75	2371.89	5.20	5.16	-17.17	0.05	17.93	286.73
2466.00	0.21	320.43	2465.89	5.32	5.28	-17.39	0.20	18.17	286.89
2560.00	0.27	322.46	2559.89	5.63	5.59	-17.63	0.06	18.50	287.59
2654.00	0.62	260.94	2653.89	5.73	5.69	-18.27	0.58	19.14	287.29
2749.00	0.48	236.20	2748.89	5.43	5.38	-19.11	0.29	19.85	285.74
2843.00	0.90	236.57	2842.88	4.80	4.76	-20.05	0.45	20.61	283.34
2937.00	1.07	229.91	2936.86	3.83	3.79	-21.34	0.21	21.68	280.06

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
3032.00	1.50	201.19	3031.84	2.11	2.06	-22.47	0.80	22.56	275.23
3126.00	2.44	181.77	3125.79	-1.04	-1.09	-22.97	1.21	23.00	267.28
3221.00	3.94	166.97	3220.64	-6.24	-6.29	-22.30	1.79	23.17	254.25
3315.00	6.08	162.00	3314.27	-14.13	-14.17	-20.03	2.33	24.54	234.72
3410.00	6.57	160.67	3408.69	-24.06	-24.09	-16.68	0.54	29.30	214.69
3504.00	6.54	162.93	3502.08	-34.26	-34.29	-13.33	0.28	36.79	201.24
3598.00	6.74	171.21	3595.45	-44.83	-44.85	-10.91	1.04	46.16	193.67
3692.00	6.79	177.47	3688.80	-55.83	-55.85	-9.83	0.79	56.71	189.98
3786.00	6.91	177.90	3782.13	-67.03	-67.05	-9.37	0.15	67.70	187.96
3881.00	6.64	175.76	3876.46	-78.22	-78.24	-8.76	0.39	78.73	186.39
3975.00	6.84	183.79	3969.82	-89.23	-89.25	-8.73	1.02	89.67	185.58
4069.00	7.00	185.62	4063.13	-100.51	-100.54	-9.66	0.29	101.00	185.49
4164.00	6.99	183.01	4157.42	-112.05	-112.07	-10.53	0.34	112.57	185.37
4267.00	6.77	182.61	4259.68	-124.37	-124.40	-11.13	0.22	124.90	185.11
4440.00	5.52	183.25	4431.69	-142.86	-142.89	-12.07	0.72	143.40	184.83
4534.00	5.28	185.10	4525.27	-151.68	-151.71	-12.71	0.31	152.24	184.79
4628.00	5.30	183.83	4618.87	-160.31	-160.35	-13.39	0.13	160.90	184.77
4722.00	5.59	183.20	4712.44	-169.22	-169.25	-13.93	0.32	169.82	184.71
4816.00	5.43	183.94	4806.01	-178.22	-178.26	-14.49	0.19	178.84	184.65
4911.00	5.52	181.10	4900.58	-187.28	-187.31	-14.89	0.30	187.90	184.54
5005.00	5.53	180.70	4994.14	-196.32	-196.36	-15.03	0.04	196.93	184.38
5099.00	5.57	179.64	5087.70	-205.41	-205.45	-15.06	0.12	206.00	184.19
5194.00	5.77	177.96	5182.23	-214.80	-214.83	-14.86	0.28	215.35	183.96
5288.00	5.75	177.54	5275.76	-224.23	-224.27	-14.49	0.05	224.73	183.70
5382.00	5.45	175.75	5369.31	-233.39	-233.42	-13.95	0.37	233.84	183.42
5477.00	5.46	174.21	5463.88	-242.38	-242.41	-13.17	0.15	242.77	183.11
5571.00	5.01	179.32	5557.49	-250.93	-250.96	-12.67	0.68	251.28	182.89
5666.00	3.59	178.41	5652.22	-258.06	-258.08	-12.53	1.50	258.39	182.78
5760.00	2.35	180.64	5746.09	-262.92	-262.95	-12.47	1.32	263.25	182.72
5854.00	0.96	138.81	5840.05	-265.44	-265.47	-11.98	1.87	265.74	182.58
5948.00	1.19	112.71	5934.04	-266.41	-266.44	-10.56	0.57	266.65	182.27
6043.00	0.82	88.36	6029.02	-266.78	-266.80	-8.97	0.58	266.95	181.93

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
6138.00	0.81	77.35	6124.01	-266.61	-266.63	-7.64	0.17	266.74	181.64
6232.00	0.81	74.35	6218.00	-266.29	-266.31	-6.35	0.05	266.38	181.37
6326.00	0.90	68.24	6311.99	-265.84	-265.86	-5.03	0.14	265.90	181.08
6421.00	0.98	68.25	6406.98	-265.27	-265.28	-3.58	0.08	265.30	180.77
6515.00	0.43	41.23	6500.97	-264.71	-264.72	-2.61	0.67	264.73	180.56
6610.00	0.54	33.02	6595.97	-264.07	-264.08	-2.13	0.14	264.09	180.46
6704.00	0.31	42.29	6689.97	-263.52	-263.52	-1.72	0.25	263.53	180.37
6798.00	0.37	30.20	6783.97	-263.07	-263.07	-1.40	0.10	263.08	180.30
6893.00	0.42	57.96	6878.96	-262.62	-262.62	-0.95	0.21	262.62	180.21
6987.00	0.17	51.70	6972.96	-262.35	-262.35	-0.55	0.27	262.35	180.12
7081.00	0.08	50.53	7066.96	-262.23	-262.23	-0.39	0.10	262.23	180.09
7175.00	0.05	150.07	7160.96	-262.22	-262.22	-0.32	0.10	262.22	180.07
7269.00	0.27	103.23	7254.96	-262.31	-262.31	-0.09	0.26	262.31	180.02
7363.00	0.14	85.96	7348.96	-262.35	-262.35	0.24	0.15	262.35	179.95
7458.00	0.24	152.43	7443.96	-262.52	-262.52	0.45	0.23	262.52	179.90
7552.00	0.17	132.48	7537.96	-262.79	-262.78	0.65	0.10	262.79	179.86
7646.00	0.36	140.37	7631.96	-263.11	-263.11	0.94	0.21	263.11	179.80
7740.00	0.30	157.18	7725.96	-263.57	-263.57	1.23	0.12	263.57	179.73
7835.00	0.44	187.20	7820.95	-264.16	-264.16	1.28	0.25	264.16	179.72
7929.00	0.49	169.28	7914.95	-264.92	-264.92	1.31	0.17	264.92	179.72
8023.00	0.69	184.60	8008.95	-265.88	-265.88	1.34	0.26	265.88	179.71
8117.00	0.80	177.73	8102.94	-267.10	-267.09	1.32	0.15	267.10	179.72
8212.00	0.93	179.01	8197.93	-268.53	-268.53	1.36	0.15	268.53	179.71
8306.00	1.07	185.73	8291.91	-270.17	-270.17	1.28	0.19	270.17	179.73
8400.00	0.36	138.49	8385.91	-271.26	-271.26	1.39	0.92	271.26	179.71
8495.00	0.50	79.32	8480.90	-271.40	-271.40	2.00	0.47	271.41	179.58
8589.00	0.44	39.98	8574.90	-271.05	-271.05	2.63	0.34	271.06	179.44
8684.00	0.82	347.92	8669.90	-270.11	-270.10	2.72	0.69	270.12	179.42
8778.00	1.78	344.96	8763.87	-268.04	-268.03	2.20	1.02	268.04	179.53
8872.00	2.18	339.24	8857.81	-264.96	-264.96	1.19	0.47	264.96	179.74
8967.00	1.91	331.93	8952.75	-261.87	-261.87	-0.19	0.39	261.87	180.04
9061.00	1.69	338.14	9046.71	-259.19	-259.20	-1.45	0.31	259.20	180.32

MD	INC	AZIM	TVD	VS	+N/S	+E/W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	%/100ft	ft	deg
9155.00	1.70	336.50	9140.67	-256.62	-256.63	-2.52	0.05	256.64	180.56
9249.00	1.97	331.75	9234.62	-253.91	-253.92	-3.85	0.32	253.95	180.87
9343.00	1.64	321.38	9328.57	-251.43	-251.45	-5.45	0.49	251.51	181.24
9437.00	1.54	296.26	9422.54	-249.82	-249.83	-7.43	0.75	249.94	181.70
9532.00	1.09	261.41	9517.51	-249.38	-249.40	-9.47	0.95	249.58	182.18
9626.00	0.36	158.49	9611.51	-249.79	-249.81	-10.25	1.30	250.02	182.35
9720.00	0.92	119.85	9705.50	-250.44	-250.46	-9.49	0.72	250.64	182.17
9774.00	1.10	123.85	9759.49	-250.95	-250.97	-8.68	0.36	251.12	181.98
9816.00	1.42	120.85	9801.48	-251.44	-251.46	-7.90	0.79	251.58	181.80
9910.00	9.34	14.94	9895.07	-244.66	-244.67	-4.92	10.45	244.72	181.15
10005.00	22.18	3.90	9986.33	-219.22	-219.22	-1.70	13.82	219.23	180.44
10052.00	26.90	4.29	10029.07	-199.76	-199.76	-0.30	10.05	199.76	180.09
10099.00	31.26	4.94	10070.14	-177.00	-176.99	1.55	9.30	177.00	179.50
10147.00	35.72	2.92	10110.16	-150.59	-150.58	3.33	9.56	150.61	178.73
10194.00	38.46	358.64	10147.65	-122.26	-122.25	3.69	8.01	122.31	178.27
10241.00	43.02	356.76	10183.26	-91.62	-91.62	2.43	10.05	91.65	178.48
10288.00	44.45	357.01	10217.21	-59.18	-59.17	0.67	3.06	59.18	179.35
10335.00	47.00	357.65	10250.03	-25.56	-25.56	-0.89	5.52	25.58	182.00
10383.00	47.67	357.54	10282.56	9.71	9.70	-2.37	1.41	9.99	346.25
10430.00	52.74	359.66	10312.63	45.79	45.79	-3.23	11.33	45.90	355.96
10477.00	55.76	358.66	10340.09	83.93	83.92	-3.79	6.65	84.01	357.41
10524.00	55.95	358.24	10366.46	122.82	122.81	-4.85	0.85	122.90	357.74
10571.00	62.23	359.38	10390.60	163.11	163.10	-5.67	13.51	163.20	358.01
10618.00	67.51	359.42	10410.55	205.65	205.64	-6.12	11.25	205.73	358.30
10665.00	72.70	358.84	10426.54	249.82	249.81	-6.79	11.09	249.90	358.44
10712.00	78.20	358.07	10438.34	295.29	295.27	-8.02	11.81	295.38	358.44
10823.00	85.06	356.08	10454.49	404.90	404.87	-13.64	6.43	405.10	358.07
10917.00	89.46	356.87	10458.98	498.60	498.56	-19.41	4.76	498.94	357.77
11009.00	90.97	358.03	10458.63	590.52	590.47	-23.50	2.07	590.93	357.72
11101.00	89.06	358.31	10458.60	682.47	682.41	-26.44	2.10	682.93	357.78
11193.00	89.53	357.54	10459.74	774.41	774.35	-29.77	0.99	774.92	357.80
11285.00	90.00	0.01	10460.11	866.39	866.32	-31.74	2.74	866.90	357.90

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
11377.00	90.67	0.56	10459.57	958.38	958.31	-31.27	0.94	958.82	358.13
11469.00	91.34	0.27	10457.96	1050.36	1050.30	-30.60	0.80	1050.74	358.33
11561.00	91.82	0.54	10455.42	1142.32	1142.26	-29.95	0.59	1142.65	358.50
11653.00	90.07	359.91	10453.91	1234.30	1234.24	-29.59	2.02	1234.60	358.63
11746.00	90.00	359.64	10453.86	1327.30	1327.24	-29.95	0.30	1327.58	358.71
11838.00	90.30	359.54	10453.61	1419.30	1419.24	-30.61	0.35	1419.57	358.76
11930.00	89.23	359.49	10453.99	1511.30	1511.23	-31.39	1.17	1511.56	358.81
12022.00	89.70	0.13	10454.85	1603.29	1603.23	-31.70	0.87	1603.54	358.87
12114.00	90.37	359.71	10454.80	1695.29	1695.23	-31.83	0.87	1695.52	358.92
12205.00	88.46	358.50	10455.73	1786.27	1786.20	-33.25	2.49	1786.51	358.93
12299.00	88.29	358.41	10458.40	1880.21	1880.13	-35.78	0.20	1880.47	358.91
12394.00	88.59	358.48	10460.99	1975.14	1975.06	-38.36	0.33	1975.43	358.89
12489.00	89.53	359.07	10462.55	2070.11	2070.03	-40.39	1.17	2070.42	358.88
12583.00	90.50	359.87	10462.52	2164.11	2164.02	-41.25	1.34	2164.41	358.91
12677.00	91.21	359.57	10461.12	2258.10	2258.01	-41.71	0.82	2258.39	358.94
12771.00	91.21	359.75	10459.14	2352.07	2351.98	-42.27	0.19	2352.36	358.97
12865.00	91.91	359.75	10456.58	2446.04	2445.95	-42.69	0.75	2446.32	359.00
12960.00	90.20	0.68	10454.82	2541.02	2540.93	-42.33	2.05	2541.28	359.05
13055.00	90.57	0.88	10454.18	2636.00	2635.92	-41.03	0.44	2636.23	359.11
13150.00	88.69	1.86	10454.79	2730.96	2730.88	-38.77	2.23	2731.16	359.19
13244.00	88.62	2.47	10457.00	2824.86	2824.79	-35.22	0.66	2825.01	359.29
13338.00	89.43	2.86	10458.59	2918.73	2918.67	-30.85	0.95	2918.83	359.39
13432.00	90.03	3.93	10459.04	3012.55	3012.50	-25.28	1.31	3012.61	359.52
13527.00	88.19	0.80	10460.51	3107.44	3107.40	-21.36	3.82	3107.47	359.61
13621.00	88.42	0.67	10463.29	3201.38	3201.35	-20.16	0.28	3201.41	359.64
13715.00	87.58	357.11	10466.57	3295.30	3295.26	-21.97	3.89	3295.33	359.62
13809.00	89.06	354.08	10469.32	3388.98	3388.92	-29.19	3.59	3389.05	359.51
13903.00	89.63	353.65	10470.40	3482.46	3482.38	-39.24	0.76	3482.60	359.35
13997.00	90.30	353.59	10470.45	3575.90	3575.80	-49.69	0.72	3576.14	359.20
14092.00	90.74	353.97	10469.59	3670.36	3670.23	-59.99	0.61	3670.72	359.06
14186.00	91.01	353.63	10468.16	3763.82	3763.67	-70.14	0.46	3764.32	358.93
14280.00	88.86	353.11	10468.27	3857.21	3857.03	-81.00	2.35	3857.89	358.80

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
14374.00	89.03	353.07	10470.00	3950.53	3950.34	-92.31	0.18	3951.41	358.66
14469.00	89.36	353.73	10471.34	4044.92	4044.69	-103.24	0.78	4046.01	358.54
14564.00	89.46	353.60	10472.31	4139.36	4139.11	-113.72	0.17	4140.67	358.43
14659.00	89.36	353.87	10473.29	4233.81	4233.54	-124.09	0.30	4235.36	358.32
14753.00	89.60	353.85	10474.14	4327.29	4326.99	-134.15	0.25	4329.07	358.22
14847.00	89.77	354.40	10474.66	4420.81	4420.50	-143.78	0.61	4422.83	358.14
14941.00	90.27	354.15	10474.64	4514.36	4514.03	-153.16	0.60	4516.63	358.06
15036.00	90.57	354.20	10473.94	4608.89	4608.53	-162.80	0.32	4611.41	357.98
15131.00	90.64	354.02	10472.94	4703.41	4703.03	-172.56	0.20	4706.19	357.90
15225.00	90.84	353.55	10471.73	4796.87	4796.47	-182.74	0.54	4799.95	357.82
15320.00	90.94	353.55	10470.25	4891.28	4890.85	-193.41	0.11	4894.68	357.74
15414.00	88.96	354.08	10470.34	4984.75	4984.30	-203.53	2.18	4988.45	357.66
15508.00	88.86	353.94	10472.13	5078.24	5077.77	-213.34	0.18	5082.25	357.59
15603.00	89.33	355.12	10473.63	5172.82	5172.32	-222.40	1.34	5177.10	357.54
15698.00	89.93	355.49	10474.24	5267.51	5267.00	-230.18	0.74	5272.03	357.50
15792.00	90.54	355.62	10473.86	5361.24	5360.72	-237.47	0.66	5365.98	357.46
15886.00	89.77	356.38	10473.61	5455.03	5454.49	-244.03	1.15	5459.94	357.44
15981.00	90.13	356.51	10473.69	5549.86	5549.30	-249.92	0.41	5554.93	357.42
16075.00	90.40	355.93	10473.25	5643.66	5643.10	-256.12	0.68	5648.91	357.40
16170.00	88.69	356.92	10474.00	5738.48	5737.90	-262.05	2.08	5743.89	357.39
16265.00	88.86	356.73	10476.03	5833.33	5832.74	-267.31	0.26	5838.86	357.38
16359.00	89.16	356.41	10477.66	5927.16	5926.55	-272.93	0.47	5932.84	357.36
16454.00	90.00	356.94	10478.35	6022.01	6021.39	-278.44	1.04	6027.83	357.35
16549.00	89.53	356.84	10478.74	6116.88	6116.25	-283.60	0.51	6122.82	357.35
16643.00	90.50	357.19	10478.72	6210.76	6210.12	-288.49	1.10	6216.82	357.34
16738.00	89.19	355.13	10478.97	6305.55	6304.90	-294.85	2.58	6311.79	357.32
16832.00	89.97	355.30	10479.66	6399.24	6398.57	-302.69	0.84	6405.73	357.29
16926.00	91.38	356.70	10478.55	6493.01	6492.33	-309.25	2.12	6499.69	357.27
17021.00	90.17	356.10	10477.27	6587.83	6587.13	-315.21	1.42	6594.67	357.26
17115.00	90.44	355.79	10476.78	6681.61	6680.89	-321.85	0.43	6688.64	357.24
17209.00	88.96	356.25	10477.27	6775.39	6774.66	-328.37	1.64	6782.62	357.23
17304.00	89.23	356.10	10478.77	6870.18	6869.44	-334.69	0.32	6877.59	357.21

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft	CLOSURE DIST ft	CLOSURE DIR deg
17398.00	90.71	359.32	10478.83	6964.10	6963.35	-338.45	3.76	6971.57	357.22
17492.00	91.81	0.14	10476.76	7058.08	7057.33	-338.90	1.47	7065.46	357.25
17587.00	91.04	3.23	10474.39	7152.99	7152.24	-336.11	3.36	7160.14	357.31
17681.00	90.20	3.72	10473.37	7246.79	7246.06	-330.41	1.03	7253.59	357.39
17776.00	90.10	6.35	10473.12	7341.40	7340.69	-322.07	2.78	7347.75	357.49
17870.00	90.94	6.46	10472.27	7434.78	7434.10	-311.58	0.90	7440.62	357.60
17964.00	91.14	7.77	10470.56	7528.02	7527.35	-299.93	1.41	7533.33	357.72
18059.00	91.27	7.13	10468.56	7622.16	7621.53	-287.62	0.69	7626.96	357.84
18153.00	89.90	8.96	10467.59	7715.20	7714.60	-274.47	2.43	7719.48	357.96
18247.00	90.20	9.23	10467.51	7807.98	7807.41	-259.61	0.44	7811.73	358.10
18342.00	90.57	10.92	10466.87	7901.47	7900.94	-242.99	1.82	7904.68	358.24
18436.00	89.13	10.17	10467.12	7993.84	7993.35	-225.78	1.73	7996.54	358.38
18530.00	90.44	11.79	10467.48	8086.07	8085.62	-207.88	2.22	8088.30	358.53
18624.00	89.09	13.66	10467.86	8177.71	8177.31	-187.17	2.45	8179.45	358.69
18719.00	89.76	13.81	10468.81	8269.94	8269.58	-164.61	0.72	8271.22	358.86
18813.00	90.10	13.85	10468.92	8361.16	8360.86	-142.14	0.36	8362.07	359.03
18907.00	90.60	13.78	10468.34	8452.38	8452.14	-119.69	0.54	8452.98	359.19
19002.00	90.97	13.43	10467.03	8544.66	8544.46	-97.34	0.54	8545.01	359.35
19096.00	90.77	10.99	10465.60	8636.47	8636.32	-77.46	2.60	8636.66	359.49
19190.00	90.80	8.29	10464.30	8729.09	8728.97	-61.73	2.88	8729.19	359.59
19285.00	91.95	7.65	10462.02	8823.11	8823.02	-48.56	1.38	8823.16	359.68
19379.00	92.11	5.81	10458.69	8916.38	8916.31	-37.56	1.96	8916.39	359.76
19473.00	90.03	3.37	10456.93	9010.03	9009.98	-30.04	3.41	9010.03	359.81
19568.00	91.01	2.56	10456.07	9104.89	9104.85	-25.13	1.33	9104.89	359.84
19662.00	89.46	0.31	10455.68	9198.84	9198.81	-22.77	2.90	9198.84	359.86
19756.00	89.66	359.35	10456.40	9292.84	9292.81	-23.06	1.05	9292.84	359.86
19851.00	90.84	359.40	10455.98	9387.83	9387.80	-24.09	1.24	9387.83	359.85
19945.00	91.78	359.62	10453.83	9481.80	9481.77	-24.90	1.03	9481.80	359.85
20039.00	90.60	358.45	10451.88	9575.77	9575.73	-26.48	1.77	9575.77	359.84
20134.00	90.87	358.43	10450.66	9670.73	9670.69	-29.07	0.28	9670.73	359.83
20228.00	91.41	358.14	10448.78	9764.68	9764.63	-31.88	0.65	9764.68	359.81
20322.00	91.92	358.42	10446.05	9858.60	9858.55	-34.69	0.62	9858.61	359.80

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
20416.00	93.00	358.69	10442.01	9952.49	9952.43	-37.06	1.19	9952.50	359.79
20486.00	93.00	358.69	10438.34	10022.38	10022.31	-38.66	0.00	10022.39	359.78