

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

DIST. 3 Form C-102
Revised October 12, 2005

DISTRICT II
1301 West Grand Avenue, Artesia, N.M. 88210

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

"AS DRILLED PLAT"

☐ AMENDED REPORT

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34982	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 7451	⁵ Property Name SAN JUAN	⁶ Well Number 20S
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 5751'

¹⁰ Surface Location

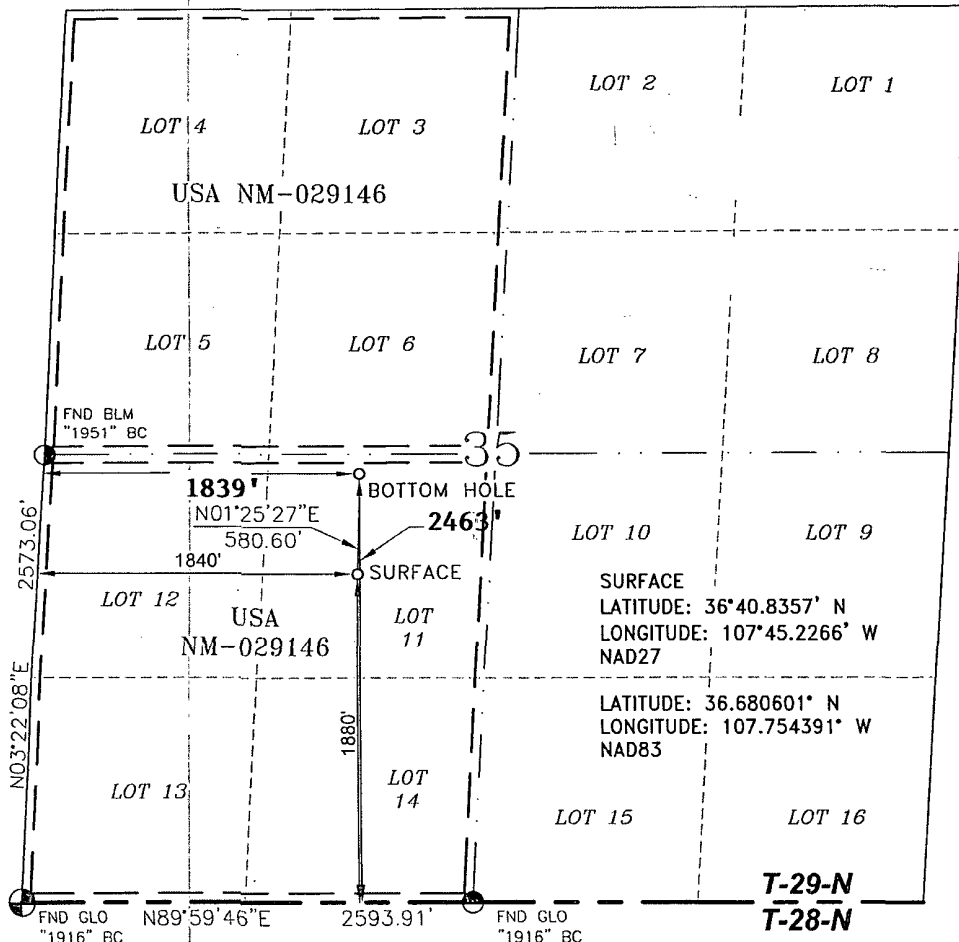
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	35	29-N	9-W		1880	SOUTH	1840	WEST	SAN JUAN

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
K	35	29-N	9-W		2463	SOUTH	1839	WEST	SAN JUAN

¹² Dedicated Acres FC 306.10 ACRES W/2	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



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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Crystal Tafoya 1/20/11
Signature
Crystal Tafoya 1/20/2011
Printed Name

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.

12-3-08
Date of Survey
Signature: *Glen W. Russell*
GLEN W. RUSSELL
NEW MEXICO
LICENSED PROFESSIONAL SURVEYOR
15703
Certificate Number 15703

Legal WellName : SAN JUAN #20S	API / UWI: 3004534982
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP	Surf Loc: 035-029N-009W-K
St/Prov: NEW MEXICO	N/S Dist (ft): 1,880.00 - FSL
County: SAN JUAN	E/W Dist (ft): 1,840.00 - FWL

Wellbore Name : Original Hole

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
INCLINATION SURVEYS	10/08/2010	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
10/08/2010	130.00	1.25	.00	Inc-Drop	MOTE
10/08/2010	231.00	2.00	.00	Inc-Drop	MOTE

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
DIRECTIONAL SURVEY	10/31/2010	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
10/31/2010	299.00	2.47	344.67	IncAzi-MWD	Scientific Drilling
10/31/2010	360.00	5.08	350.51	IncAzi-MWD	Scientific Drilling
10/31/2010	421.00	5.65	352.80	IncAzi-MWD	Scientific Drilling
10/31/2010	482.00	7.11	3.27	IncAzi-MWD	Scientific Drilling
10/31/2010	543.00	8.17	6.37	IncAzi-MWD	Scientific Drilling
10/31/2010	605.00	9.28	8.41	IncAzi-MWD	Scientific Drilling
10/31/2010	635.00	10.52	6.79	IncAzi-MWD	Scientific Drilling
10/31/2010	666.00	12.28	5.84	IncAzi-MWD	Scientific Drilling
10/31/2010	697.00	14.16	3.63	IncAzi-MWD	Scientific Drilling
10/31/2010	727.00	14.63	3.80	IncAzi-MWD	Scientific Drilling
10/31/2010	758.00	16.18	2.86	IncAzi-MWD	Scientific Drilling
10/31/2010	788.00	17.50	1.89	IncAzi-MWD	Scientific Drilling
10/31/2010	833.00	19.75	358.94	IncAzi-MWD	Scientific Drilling
10/31/2010	878.00	22.00	357.44	IncAzi-MWD	Scientific Drilling
10/31/2010	923.00	24.02	357.82	IncAzi-MWD	Scientific Drilling
10/31/2010	968.00	26.47	359.64	IncAzi-MWD	Scientific Drilling
10/31/2010	1,013.00	28.88	358.01	IncAzi-MWD	Scientific Drilling
11/01/2010	1,058.00	31.02	356.56	IncAzi-MWD	Scientific Drilling
11/01/2010	1,103.00	32.59	357.79	IncAzi-MWD	Scientific Drilling
11/01/2010	1,148.00	33.10	357.25	IncAzi-MWD	Scientific Drilling
11/01/2010	1,194.00	34.02	357.52	IncAzi-MWD	Scientific Drilling
11/01/2010	1,239.00	34.40	358.88	IncAzi-MWD	Scientific Drilling
11/01/2010	1,283.00	34.16	.65	IncAzi-MWD	Scientific Drilling
11/01/2010	1,328.00	34.00	1.00	IncAzi-MWD	Scientific Drilling
11/01/2010	1,373.00	33.14	1.61	IncAzi-MWD	Scientific Drilling
11/01/2010	1,418.00	30.31	2.67	IncAzi-MWD	Scientific Drilling
11/01/2010	1,463.00	27.97	4.06	IncAzi-MWD	Scientific Drilling

11/01/2010	1,508.00	26.15	5.37	IncAzi-MWD	Scientific Drilling
11/01/2010	1,553.00	24.47	5.02	IncAzi-MWD	Scientific Drilling
11/01/2010	1,598.00	22.95	2.69	IncAzi-MWD	Scientific Drilling
11/01/2010	1,643.00	21.00	.96	IncAzi-MWD	Scientific Drilling
11/01/2010	1,688.00	18.90	2.10	IncAzi-MWD	Scientific Drilling
11/01/2010	1,733.00	17.49	1.99	IncAzi-MWD	Scientific Drilling
11/01/2010	1,778.00	16.14	1.25	IncAzi-MWD	Scientific Drilling
11/01/2010	1,823.00	14.22	1.83	IncAzi-MWD	Scientific Drilling
11/01/2010	1,868.00	12.76	1.48	IncAzi-MWD	Scientific Drilling
11/01/2010	1,913.00	10.41	2.10	IncAzi-MWD	Scientific Drilling
11/01/2010	1,958.00	8.57	2.10	IncAzi-MWD	Scientific Drilling
11/01/2010	2,003.00	6.83	7.86	IncAzi-MWD	Scientific Drilling
11/01/2010	2,048.00	5.04	10.26	IncAzi-MWD	Scientific Drilling
11/01/2010	2,093.00	3.32	2.90	IncAzi-MWD	Scientific Drilling
11/01/2010	2,138.00	1.79	342.40	IncAzi-MWD	Scientific Drilling
11/01/2010	2,183.00	.94	282.31	IncAzi-MWD	Scientific Drilling
11/02/2010	2,228.00	1.34	251.33	IncAzi-MWD	Scientific Drilling
11/02/2010	2,273.00	1.10	268.70	IncAzi-MWD	Scientific Drilling
11/02/2010	2,318.00	.82	257.49	IncAzi-MWD	Scientific Drilling
11/02/2010	2,363.00	1.08	253.08	IncAzi-MWD	Scientific Drilling
11/02/2010	2,443.00	1.44	254.52	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I, acting in my capacity as Drilling Engineer for ConocoPhillips Company am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.

[Signature]

Subscribed and sworn to me this January 20, 2011

[Signature]

Notary Public in and for San Juan County, New Mexico

My Commission expires 10/12/2014

RCVD JAN 24 '11

OIL CONS. DIV.

DIST. 3

ConocoPhillips

SJB (NM West)
SEC 35-T29N-R9W
SJ #20S
API# 3004534982
Original Hole

Survey: Actual

Standard Survey Report

14 November, 2010

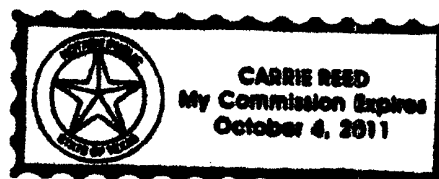
This survey is correct to the best of my knowledge and is supported by actual field data.

Lehman

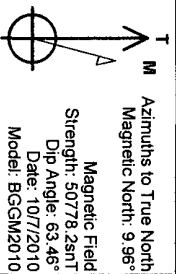
Notorized this date 14th of November, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



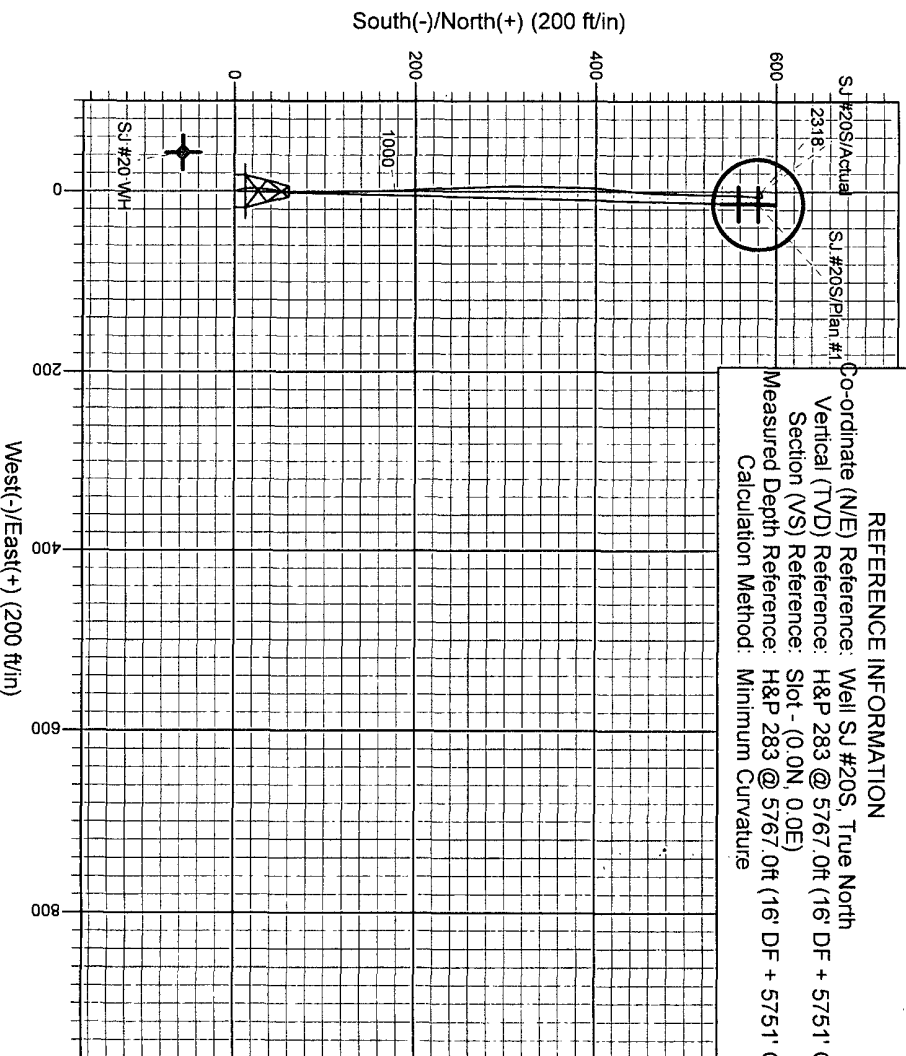
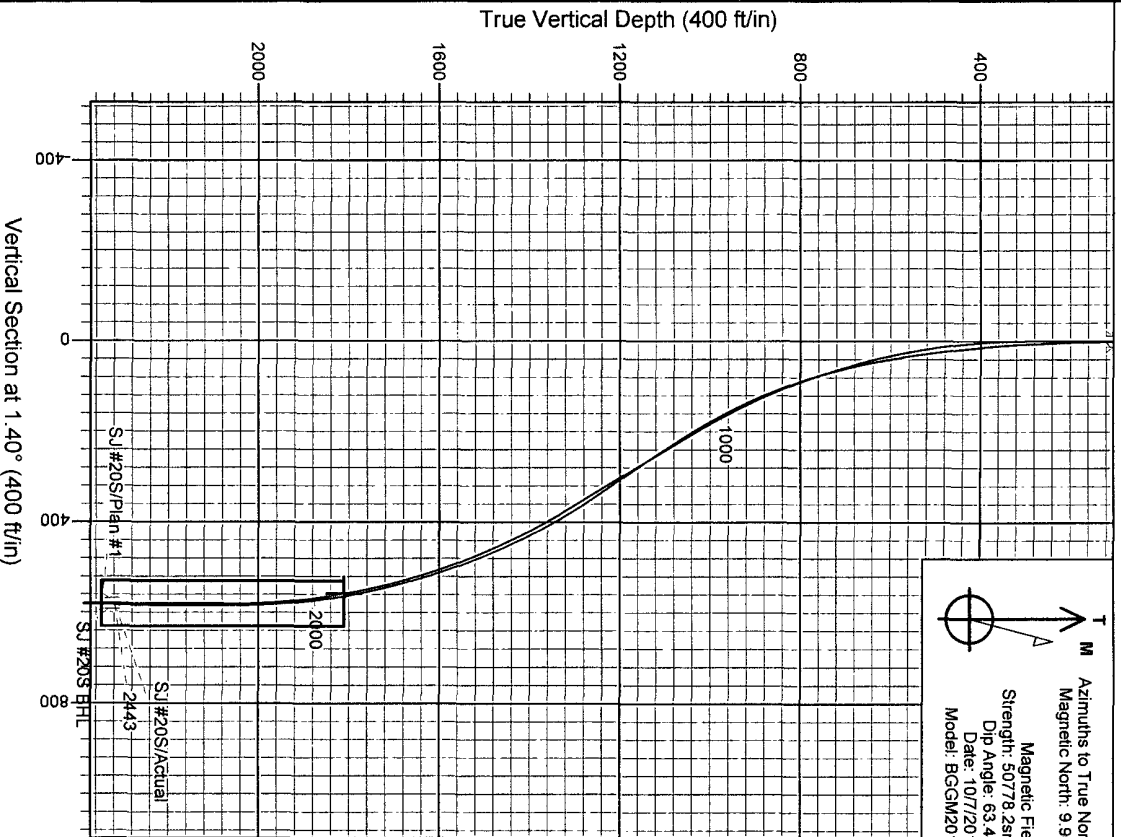
Project: SJB (NM West)
Site: SEC 35-T29N-R9W
Well: SJ #20S
Wellbore: Original Hole
Design: Plan #1



+N/-S 0.0 +E/-W 0.0 Northing 2066999.84

WELL DETAILS: SJ #20S
H&P 283 @ 5767.0ft (16' DF + 5751' GL)
Ground Level: 5751.0
Easting 523328.57 36° 40' 50.142 N 107° 45' 13.596 W Slot

REFERENCE INFORMATION
Co-ordinate (NE) Reference: Well SJ #20S, True North
Vertical (TVD) Reference: H&P 283 @ 5767.0ft (16' DF + 5751' GL)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: H&P 283 @ 5767.0ft (16' DF + 5751' GL)
Calculation Method: Minimum Curvature



COMPANY DETAILS: ConocoPhillips
Calculation Method: Minimum Curvature
Error System: ISCWSA
Scan Method: Closest Approach 3D
Error Surface: Combined Covariances
Warning Method: Risk Ratio

PROJECT DETAILS: SJB (NM West)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level

SITE DETAILS: SEC 35-T29N-R9W
San Juan County NM
Site Centre Latitude: 36° 40' 50.142 N
Longitude: 107° 45' 13.596 W
Positional Uncertainty: 7.5
Convergence: 0.05
Local North: True

Scientific Drilling International, Inc.
Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ #20S
Project:	SJB (NM West)	TVD Reference:	H&P 283 @ 5767.0ft (16' DF + 5751' GL)
Site:	SEC 35-T29N-R9W	MD Reference:	H&P 283 @ 5767.0ft (16' DF + 5751' GL)
Well:	SJ #20S	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	edmCOP

Project	SJB (NM West), New Mexico, S-Type MV/DK Wells		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		Using Well Reference Point
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	SEC 35-T29N-R9W		
Site Position:		Northing:	2,066,999.84 ft
From:	Lat/Long	Easting:	523,328.57 ft
Position Uncertainty:	15.0 ft	Slot Radius:	6-1/8"
		Latitude:	36° 40' 50.142 N
		Longitude:	107° 45' 13.596 W
		Grid Convergence:	0.05 °

Well	SJ #20S, S-Type FC Well		
Well Position	+N/-S	0.0 ft	Northing: 2,066,999.84 ft
	+E/-W	0.0 ft	Easting: 523,328.57 ft
Position Uncertainty		3.5 ft	Wellhead Elevation: ft
			Ground Level: 5,751.0 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	10/7/2010	9.96	63.46	50,778

Design	Original Hole			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.10

Survey Program	Date 11/14/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
299.0	2,443.0	Actual (Original Hole)	MWD SDI	MWD - Standard ver 1.0.1

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
299.0	2.47	344.67	298.9	6.2	-1.7	6.2	0.83	0.83	0.00
360.0	5.08	350.51	359.8	10.1	-2.5	10.1	4.32	4.28	9.57
421.0	5.65	352.80	420.5	15.8	-3.3	15.8	1.00	0.93	3.75
482.0	7.11	3.27	481.1	22.5	-3.5	22.5	3.05	2.39	17.16
543.0	8.17	6.37	541.6	30.6	-2.8	30.6	1.86	1.74	5.08
605.0	9.28	8.41	602.9	39.9	-1.6	39.9	1.86	1.79	3.29
635.0	10.52	6.79	632.4	45.1	-0.9	45.0	4.24	4.13	-5.40
666.0	12.28	5.84	662.8	51.1	-0.2	51.1	5.71	5.68	-3.06
697.0	14.16	3.63	693.0	58.2	0.4	58.2	6.28	6.06	-7.13
727.0	14.63	3.80	722.0	65.6	0.8	65.6	1.57	1.57	0.57
758.0	16.18	2.86	751.9	73.9	1.3	73.9	5.06	5.00	-3.03
788.0	17.50	1.89	780.6	82.6	1.7	82.6	4.50	4.40	-3.23

Scientific Drilling International, Inc.
Survey Report

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well SJ #20S
Project:	SJB (NM West)	TVD Reference:	H&P 283 @ 5767.0ft (16' DF + 5751' GL)
Site:	SEC 35-T29N-R9W	MD Reference:	H&P 283 @ 5767.0ft (16' DF + 5751' GL)
Well:	SJ #20S	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	edmCOP

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
833.0	19.75	358.94	823.3	96.9	1.8	96.9	5.42	5.00	-6.56
878.0	22.00	357.44	865.3	112.9	1.2	112.9	5.14	5.00	-3.33
923.0	24.02	357.82	906.7	130.5	0.5	130.5	4.50	4.49	0.84
968.0	26.47	359.64	947.4	149.7	0.1	149.7	5.71	5.44	4.04
1,013.0	28.88	358.01	987.3	170.6	-0.3	170.6	5.61	5.36	-3.62
1,058.0	31.02	356.56	1,026.3	193.0	-1.4	193.0	5.02	4.76	-3.22
1,103.0	32.59	357.79	1,064.5	216.7	-2.6	216.7	3.77	3.49	2.73
1,148.0	33.10	357.25	1,102.3	241.1	-3.6	241.1	1.31	1.13	-1.20
1,194.0	34.02	357.52	1,140.7	266.5	-4.8	266.5	2.03	2.00	0.59
1,239.0	34.40	358.88	1,177.9	291.8	-5.6	291.8	1.90	0.84	3.02
1,283.0	34.16	0.65	1,214.2	316.6	-5.7	316.6	2.33	-0.55	4.02
1,328.0	34.00	1.00	1,251.5	341.8	-5.3	341.8	0.56	-0.36	0.78
1,373.0	33.14	1.61	1,289.0	366.7	-4.8	366.6	2.05	-1.91	1.36
1,418.0	30.31	2.67	1,327.3	390.3	-3.9	390.3	6.41	-6.29	2.36
1,463.0	27.97	4.06	1,366.6	412.2	-2.6	412.2	5.41	-5.20	3.09
1,508.0	26.15	5.37	1,406.6	432.6	-0.9	432.6	4.26	-4.04	2.91
1,553.0	24.47	5.02	1,447.3	451.7	0.8	451.7	3.75	-3.73	-0.78
1,598.0	22.95	2.69	1,488.5	469.8	2.0	469.8	3.97	-3.38	-5.18
1,643.0	21.00	0.96	1,530.3	486.6	2.6	486.6	4.57	-4.33	-3.84
1,688.0	18.90	2.10	1,572.6	502.0	3.0	502.0	4.75	-4.67	2.53
1,733.0	17.49	1.99	1,615.3	516.0	3.5	516.0	3.13	-3.13	-0.24
1,778.0	16.14	1.25	1,658.4	529.0	3.9	529.0	3.04	-3.00	-1.64
1,823.0	14.22	1.83	1,701.8	540.8	4.2	540.8	4.28	-4.27	1.29
1,868.0	12.76	1.48	1,745.6	551.3	4.5	551.3	3.25	-3.24	-0.78
1,913.0	10.41	2.10	1,789.6	560.3	4.8	560.3	5.23	-5.22	1.38
1,958.0	8.57	2.10	1,834.0	567.7	5.0	567.7	4.09	-4.09	0.00
2,003.0	6.83	7.86	1,878.6	573.7	5.5	573.7	4.23	-3.87	12.80
2,048.0	5.04	10.26	1,923.4	578.3	6.2	578.3	4.01	-3.98	5.33
2,093.0	3.32	2.90	1,968.3	581.6	6.7	581.6	4.00	-3.82	-16.36
2,138.0	1.79	342.40	2,013.2	583.5	6.5	583.6	3.91	-3.40	-45.56
2,183.0	0.94	282.31	2,058.2	584.3	5.9	584.3	3.45	-1.89	-133.53
2,228.0	1.34	251.33	2,103.2	584.2	5.1	584.2	1.60	0.89	-68.84
2,273.0	1.10	268.70	2,148.2	584.0	4.1	584.0	0.97	-0.53	38.60
2,318.0	0.82	257.49	2,193.2	583.9	3.4	584.0	0.75	-0.62	-24.91
2,363.0	1.08	253.08	2,238.2	583.8	2.7	583.8	0.60	0.58	-9.80
2,443.0	1.44	254.52	2,318.1	583.3	1.0	583.3	0.45	0.45	1.80