

Well Name: OZZY FEDERAL COM 18D

Well Location: T17S / R28E / SEC 13 / SESE / 32.8293225 / -104.1235233

County or Parish/State: EDDY / NM

Well Number: 001H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM14847

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001548329

Operator: LONGFELLOW ENERGY LP

Notice of Intent

Sundry ID: 2778164

Type of Submission: Notice of Intent

Date Sundry Submitted: 03/06/2024

Date proposed operation will begin: 07/16/2024

Type of Action: APD Change

Time Sundry Submitted: 01:26

Procedure Description: Will change from 1-mile lateral to 2-mile lateral. Request to change SHL from 270' FSL & 650' FEL, Section 13, 17S 28E to 260' FSL & 610' FEL Section 13, 17S 28E. Request to change BHL from 1185' FSL and 20' FEL Section 18, 17S 29E to 888' FSL & 20' FEL Section 17, 17S 29E. TVD will change from 4550' to 4759', but is still in the Glorieta-Yeso. MD will change from 9632' to 15100'. Pad has not yet been built. No change in pad footprint. Revised drilling documents attached.

NOI Attachments

Procedure Description

Ozzy_18D_1H_Sundry_Revised_Drilling_Docs_20240306130411.pdf

Received by OCD: 9/25/2024 9:34:44 AM

Page 2 of 34

Well Name: OZZY FEDERAL COM 18D	Well Location: T17S / R28E / SEC 13 / SESE / 32.8293225 / -104.1235233	County or Parish/State: EDDY / NM
Well Number: 001H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM14847	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001548329	Operator: LONGFELLOW ENERGY LP	

Conditions of Approval

Additional

Ozzy_Federal_Com_18D_001H_Dr_COA_20240923083152.pdf
13_17_28_P_Sundry_ID_2778164_Ozzy_Federal_Com_18D_001H_Eddy_NM14847_LONGFELLOW_ENERGY_LP_13_22g_2_27_2024_LV_20240923083152.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: BRIAN WOOD

Signed on: MAR 06, 2024 01:13 PM

Name: LONGFELLOW ENERGY LP

Title: Permitting Agent

Street Address: 37 VERANO LOOP

City: SANTA FEState: NM

Phone: (505) 466-8120

Email address: AFMSS@PERMITSWEST.COM

Field

Representative Name:

Street Address:

City:State:Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 09/23/2024

Signature: Chris Walls

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: (505) 748-1283 Fax: (505) 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

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 30-015-48329	² Pool Code 96210	³ Pool Name EMPIRE; GLORIETA-YESO
⁴ Property Code 330812	⁵ Property Name OZZY FEDERAL COM 18D	⁶ Well Number 001H
⁷ OGRID No. 372210	⁸ Operator Name LONGFELLOW ENERGY, LP	⁹ Elevation 3697.1

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	13	17 S	28 E		260	SOUTH	610	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
P	17	17 S	29 E		888	SOUTH	20	EAST	EDDY

¹² Dedicated Acres 307.04	¹³ Joint or Infill	¹⁴ Consolidation Code C	¹⁵ Order No.
--	-------------------------------	--	-------------------------

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.

dedication

WELL LOCATION

Surface Location

Bottom Hole Location

Operator Name: LONGFELLOW ENERGY, LP

Property Name: OZZY FEDERAL COM 18D

API Number: 30-015-48329

Pool Code: 96210

Pool Name: EMPIRE; GLORIETA-YESO

Property Code: 330812

OGRID No: 372210

Elevation: 3697.1

Consolidation Code: C

Order No:

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.

Brian Wood

3-4-2024

Signature _____ Date _____

BRIAN WOOD

Printed Name _____

brian@permitswest.com

E-mail Address _____

505 466-8120

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.

NOVEMBER 27, 2023

Date of Survey _____

Signature and Seal of Professional Surveyor: *William F. Jaramilla*

Certificate Number: **12797**

WILLIAM F. JARAMILLA
Professional Surveyor
No. 8393A

Intent ☐ As Drilled ☐

API #

Operator Name: LONGFELLOW ENERGY, LP	Property Name: OZZY FEDERAL COM 18D	Well Number 001H
---	---	---------------------

Kick Off Point (KOP)

UL P	Section 13	Township 17S	Range 28E	Lot	Feet 260	From N/S SOUTH	Feet 610	From E/W EAST	County EDDY
Latitude 32.8292955					Longitude 104.1233928			NAD 83	

First Take Point (FTP)

UL P	Section 18	Township 17S	Range 29E	Lot 4	Feet 982	From N/S SOUTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.8300399					Longitude 104.1210791			NAD 83	

Last Take Point (LTP)

UL P	Section 17	Township 17S	Range 29E	Lot	Feet 888	From N/S SOUTH	Feet 100	From E/W EAST	County EDDY
Latitude 32.8297417					Longitude 104.0887137			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

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

Longfellow Energy, LP
 Ozzy Federal Com 18D 001H
 SHL 260' FSL & 610' FEL 13-17S-28E
 BHL 888' FSL & 20' FEL 17-17S-29E
 Eddy County, NM

DRILL PLAN PAGE 1

"fee/fee/Fed"

"pad Ozzy 18D"

Changing from 1-mile lateral to 2-mile lateral. SHL was at 270' FSL & 650' FEL 13-17s-28e. BHL was at 1185' FSL and 20' FEL 18-17s-29e. SHL has now moved 41' ESE to 260' FSL & 610' FEL 13-17s-28e. BHL has now moved >1-mile East to 888' FSL & 20' FEL 17-17s-29e. TVD changed from 4550' to 4759' but is still in the Yeso. MD changed from 9632' to 15100'. Casing, cement, and mud changed. Pad has not been built. No change in pad footprint.

Drilling Program

1. ESTIMATED TOPS

Formation/Lithology	TVD	MD	Contents
Quaternary caliche	000'	000'	water
Rustler anyhdrite	275'	275'	N/A
Salt top	425'	425'	N/A
Salt base	650'	651'	N/A
Yates dolomite	838'	840'	hydrocarbons
Seven Rivers gypsum	1114'	1120'	N/A
Queen sandstone	1633'	1641'	hydrocarbons
Grayburg dolomite	2039'	2044'	hydrocarbons
San Andres dolomite	2353'	2367'	hydrocarbons
(KOP	3483'	3503'	hydrocarbons)
Glorieta dolomite	3748'	3771'	hydrocarbons
Yeso Paddock dolomite	3783'	3807'	hydrocarbons
Yeso Blinebry dolomite	4216'	4307'	hydrocarbons
TD	4759'	15007'	hydrocarbons

2. NOTABLE ZONES

Yeso Blinebry is the goal. Closest water well (RA 12307 POD 1) is 1.24 miles northwest. Water bearing strata were found at 80' in this 140' deep water well.

Longfellow Energy, LP
 Ozzy Federal Com 18D 001H
 SHL 260' FSL & 610' FEL 13-17S-28E
 BHL 888' FSL & 20' FEL 17-17S-29E
 Eddy County, NM

DRILL PLAN PAGE 2

"fee/fee/Fed"

"pad Ozzy 18D"

3. PRESSURE CONTROL

A 3000-psi BOP stack (rated to 5000') consisting of annular preventer and double (blind and pipe) ram will be used below surface casing to TD. BOP/BOPE will be tested by an independent service company to 250-psi low and 3000-psi high per Onshore Order 2 requirements. The system may be upgraded to a higher pressure, but still tested as described above. If the system is upgraded, then all the installed components will be functional and tested.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOPE will include a speed head, Kelly cock and floor safety valve (inside BOP), and choke lines and choke manifold. BOP and choke diagrams are attached.

Variance is requested to use a flex-hose. Test certificate for a typical hose is attached to the APD, Certificate for the hose in use will be available on the rig before drilling starts.

4. CASING & CEMENT

All casing will be API and new.

Hole O. D.	Set MD	Set TVD	Casing O. D.	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
17.5"	0' - 360'	0' - 360'	Surface 13.375"	54.5	J-55	LTC	1.125	1.125	1.8
12.25"	0' - 1300'	0' - 1295'	Inter. 9.625"	36	J-55	LTC	1.125	1.125	1.8
8.75"	0' - 4930'	0' - 4538'	Prod. 1 7"	32	L-80	BTC	1.125	1.125	1.8
	4930' - 15007'	4538' - 4759'	Prod. 2 5.5"	20	L-80	BTC	1.125	1.125	1.8

Longfellow Energy, LP
 Ozzy Federal Com 18D 001H
 SHL 260' FSL & 610' FEL 13-17S-28E
 BHL 888' FSL & 20' FEL 17-17S-29E
 Eddy County, NM

DRILL PLAN PAGE 3

"fee/fee/Fed"

"pad Ozzy 18D"

Casing Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	260	1.72	447	13.5	Class C
	Tail	125	1.33	166	14.8	Class C
TOC = GL		>100% Excess			Minimum 1 per joint starting with shoe	
Intermediate	Lead	375	2.16	810	12.2	25/75 Poz C
	Tail	170	1.33	226	14.8	Class C
TOC = GL		>100% excess			As needed	
Production	Lead	400	2.16	864	12.2	25/75 Poz C
	Tail	1730	1.33	2300	14.8	Class C
TOC = $\leq$ 1095'		50% Excess			As needed	

5. MUD PROGRAM

An electronic/mechanical mud monitor with a minimum pit volume totalizer, stroke counter, and flow sensor will be used. All necessary mud products (LCM) will be on site to handle any abnormal hole condition that may be encountered while drilling this well. A closed loop system will be used.

Type	Interval (MD)	lb/gal	Viscosity	Fluid Loss	pH
fresh water/gel	0' - 360'	8.4 - 9.0	28 - 40	NC	7.0 - 8.0
Salt saturated	360' - 1300'	8.8 - 9.2	28 - 30	NC	9.0 - 10.5
cut brine	1300' - 15007'	8.8 - 9.2	28 - 30	NC	9.0 - 10.5

6. CORES, TESTS, & LOGS

No core or drill stem test is planned.

A mud logger will be used from GL to TD. Samples will be collected every 10' in the lateral pay zone.

No electric logs are planned at this time.

Longfellow Energy, LP
Ozzy Federal Com 18D 001H
SHL 260' FSL & 610' FEL 13-17S-28E
BHL 888' FSL & 20' FEL 17-17S-29E
Eddy County, NM

DRILL PLAN PAGE 4

"fee/fee/Fed"

"pad Ozzy 18D"

7. DOWN HOLE CONDITIONS

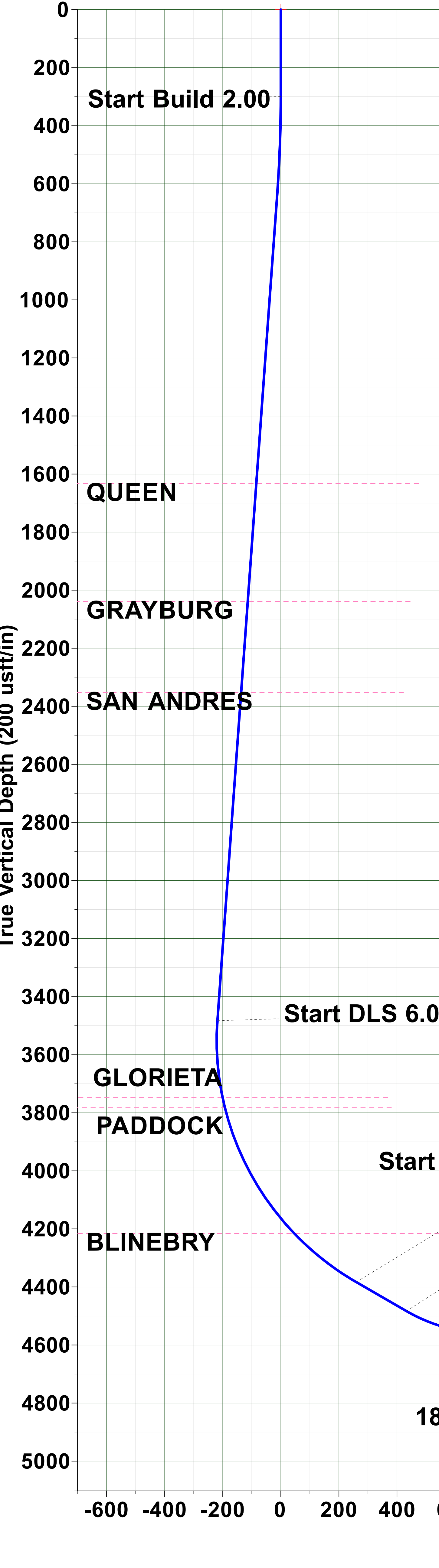
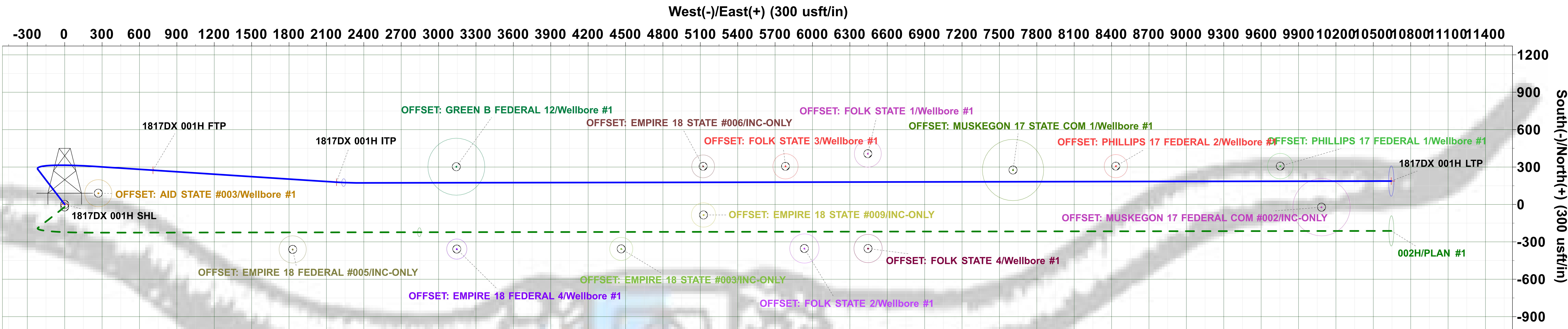
No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈ 2053 psi. Expected bottom hole temperature is $\approx 115^{\circ}$ F. A H2S drilling operation plan was attached to APD.

8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take ≈ 2 months to drill and complete the well.



Company: Longfellow Energy
Project: Eddy Co., NM (Nad-83)
Site: OZZY FEDERAL COM 18' D
Well: 001H
Wellbore: OH
Rig: TBD
Design: PLAN #1 / 11:04, November 06 2023



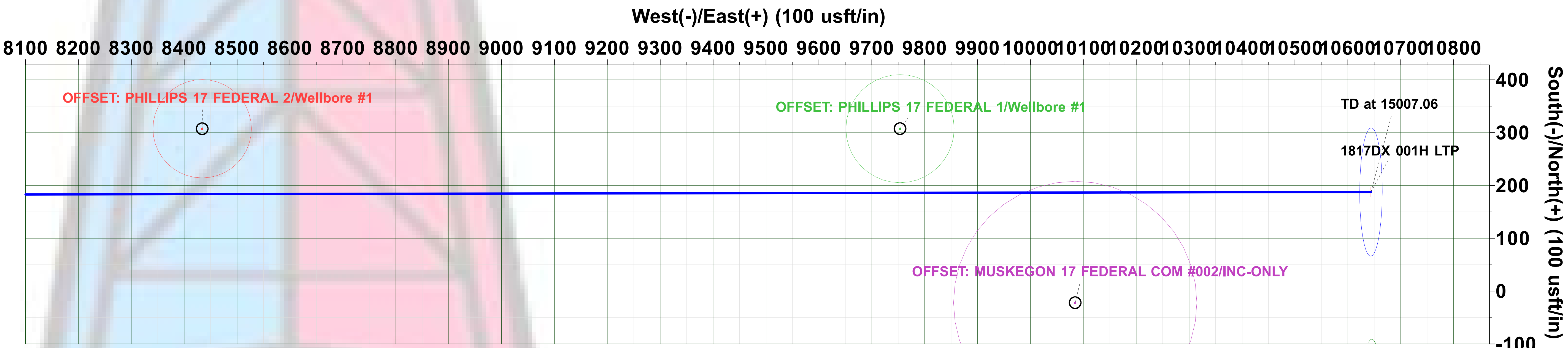
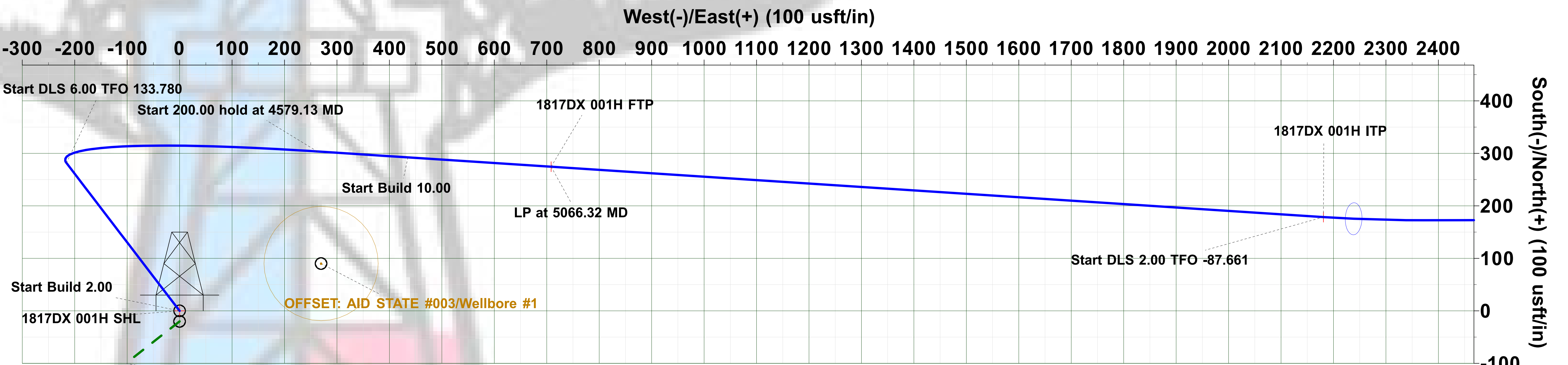
WELL DETAILS: 001H						
RKB = 20.3' @ 3723.30usft (TBD)						
3703.00						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	665492.64	605826.77	32.829290	-104.123384	

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	
3	635.60	6.71	322.55	634.84	15.59	-11.94	2.00	-12.07	
4	3503.53	6.71	322.55	3483.10	281.72	-215.75	0.00	-218.20	
5	4579.13	60.00	93.73	4383.38	303.71	262.46	6.00	259.80	
6	4779.13	60.00	93.73	4483.38	292.44	435.30	0.00	432.73	
7	5066.32	88.72	93.73	4560.00	274.64	708.39	10.00	705.97	1817DX 001H FTP
8	6542.25	88.72	93.73	4593.00	178.67	2180.83	0.00	2179.19	1817DX 001H ITP
9	6734.06	88.88	89.90	4597.02	172.61	2372.46	2.00	2370.86	
10	15007.06	88.88	89.90	4759.00	187.70	10643.86	0.00	10641.82	1817DX 001H LTP

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
1817DX 001H SHL	0.00	0.00	0.00	665492.64	605826.77	32.829290	-104.123384	
1817DX 001H FTP	4560.00	274.64	708.39	665767.28	606535.16	32.830041	-104.121076	
1817DX 001H ITP	4593.00	178.67	2180.83	665671.32	608007.60	32.829769	-104.116283	
1817DX 001H LTP	4759.00	187.70	10643.86	665680.34	616470.63	32.829743	-104.088731	

PROJECT DETAILS: Eddy Co., NM (Nad-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1633.00	1640.66	QUEEN
2039.00	2049.46	GRAYBURG
2353.00	2365.62	SAN ANDRES
3748.00	3770.70	GLORIETA
3783.00	3806.67	PADDOCK
4216.00	4307.07	BLINEBRY



Disclaimer:
All Plan Details, boundary lines and offset well location/ survey data is provided by customer and subject to customer approval.





Planning Report



Database:	WBDS_SQL_3	Local Co-ordinate Reference:	Well 001H
Company:	Longfellow Energy	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Project:	Eddy Co., NM (Nad-83)	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site:	OZZY FEDERAL COM 1817DX	North Reference:	Grid
Well:	001H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	Eddy Co., NM (Nad-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		OZZY FEDERAL COM 1817DX			
Site Position:		Northing:	665,492.65 usft	Latitude:	32.829290
From:	Lat/Long	Easting:	605,826.77 usft	Longitude:	-104.123384
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in		

Well	001H					
Well Position	+N/-S	0.00 usft	Northing:	665,492.65 usft	Latitude:	32.829290
	+E/-W	0.00 usft	Easting:	605,826.77 usft	Longitude:	-104.123384
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,703.00 usft
Grid Convergence:	0.114 °					

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.50

Plan Survey Tool Program	Date	11/06/23			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(usft)	(usft)				
1	0.00	15,007.06	PLAN #1 (OH)	MWD+IFR1+SAG+FDIR	
				OWSG MWD + IFR1 + Sag	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.000	
635.60	6.71	322.55	634.84	15.59	-11.94	2.00	2.00	0.00	322.554	
3,503.53	6.71	322.55	3,483.10	281.72	-215.75	0.00	0.00	0.00	0.000	
4,579.13	60.00	93.73	4,383.38	303.71	262.46	6.00	4.95	12.20	133.780	
4,779.13	60.00	93.73	4,483.38	292.44	435.30	0.00	0.00	0.00	0.000	
5,066.32	88.72	93.73	4,560.00	274.64	708.39	10.00	10.00	0.00	0.000	1817DX 001H FTP
6,542.25	88.72	93.73	4,593.00	178.67	2,180.83	0.00	0.00	0.00	0.000	1817DX 001H ITP
6,734.06	88.88	89.90	4,597.02	172.61	2,372.46	2.00	0.08	-2.00	-87.661	
15,007.06	88.88	89.90	4,759.00	187.70	10,643.86	0.00	0.00	0.00	0.000	1817DX 001H LTP



Planning Report



Database:	WBDS_SQL_3	Local Co-ordinate Reference:	Well 001H
Company:	Longfellow Energy	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Project:	Eddy Co., NM (Nad-83)	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site:	OZZY FEDERAL COM 1817DX	North Reference:	Grid
Well:	001H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1817DX 001H SHL									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	322.55	399.98	1.39	-1.06	-1.07	2.00	2.00	0.00
500.00	4.00	322.55	499.84	5.54	-4.24	-4.29	2.00	2.00	0.00
600.00	6.00	322.55	599.45	12.46	-9.54	-9.65	2.00	2.00	0.00
635.60	6.71	322.55	634.84	15.59	-11.94	-12.07	2.00	2.00	0.00
700.00	6.71	322.55	698.79	21.56	-16.51	-16.70	0.00	0.00	0.00
800.00	6.71	322.55	798.11	30.84	-23.62	-23.89	0.00	0.00	0.00
900.00	6.71	322.55	897.42	40.12	-30.73	-31.08	0.00	0.00	0.00
1,000.00	6.71	322.55	996.74	49.40	-37.83	-38.26	0.00	0.00	0.00
1,100.00	6.71	322.55	1,096.05	58.68	-44.94	-45.45	0.00	0.00	0.00
1,200.00	6.71	322.55	1,195.36	67.96	-52.05	-52.64	0.00	0.00	0.00
1,300.00	6.71	322.55	1,294.68	77.24	-59.15	-59.83	0.00	0.00	0.00
1,400.00	6.71	322.55	1,393.99	86.52	-66.26	-67.01	0.00	0.00	0.00
1,500.00	6.71	322.55	1,493.31	95.80	-73.37	-74.20	0.00	0.00	0.00
1,600.00	6.71	322.55	1,592.62	105.08	-80.47	-81.39	0.00	0.00	0.00
1,640.66	6.71	322.55	1,633.00	108.85	-83.36	-84.31	0.00	0.00	0.00
QUEEN									
1,700.00	6.71	322.55	1,691.94	114.36	-87.58	-88.57	0.00	0.00	0.00
1,800.00	6.71	322.55	1,791.25	123.64	-94.69	-95.76	0.00	0.00	0.00
1,900.00	6.71	322.55	1,890.57	132.92	-101.79	-102.95	0.00	0.00	0.00
2,000.00	6.71	322.55	1,989.88	142.20	-108.90	-110.13	0.00	0.00	0.00
2,049.46	6.71	322.55	2,039.00	146.79	-112.41	-113.69	0.00	0.00	0.00
GRAYBURG									
2,100.00	6.71	322.55	2,089.20	151.48	-116.00	-117.32	0.00	0.00	0.00
2,200.00	6.71	322.55	2,188.51	160.76	-123.11	-124.51	0.00	0.00	0.00
2,300.00	6.71	322.55	2,287.83	170.04	-130.22	-131.70	0.00	0.00	0.00
2,365.62	6.71	322.55	2,353.00	176.13	-134.88	-136.41	0.00	0.00	0.00
SAN ANDRES									
2,400.00	6.71	322.55	2,387.14	179.32	-137.32	-138.88	0.00	0.00	0.00
2,500.00	6.71	322.55	2,486.45	188.60	-144.43	-146.07	0.00	0.00	0.00
2,600.00	6.71	322.55	2,585.77	197.87	-151.54	-153.26	0.00	0.00	0.00
2,700.00	6.71	322.55	2,685.08	207.15	-158.64	-160.44	0.00	0.00	0.00
2,800.00	6.71	322.55	2,784.40	216.43	-165.75	-167.63	0.00	0.00	0.00
2,900.00	6.71	322.55	2,883.71	225.71	-172.86	-174.82	0.00	0.00	0.00
3,000.00	6.71	322.55	2,983.03	234.99	-179.96	-182.01	0.00	0.00	0.00
3,100.00	6.71	322.55	3,082.34	244.27	-187.07	-189.19	0.00	0.00	0.00
3,200.00	6.71	322.55	3,181.66	253.55	-194.18	-196.38	0.00	0.00	0.00
3,300.00	6.71	322.55	3,280.97	262.83	-201.28	-203.57	0.00	0.00	0.00
3,400.00	6.71	322.55	3,380.29	272.11	-208.39	-210.75	0.00	0.00	0.00
3,503.53	6.71	322.55	3,483.10	281.72	-215.75	-218.20	0.00	0.00	0.00
3,550.00	5.19	345.41	3,529.33	285.91	-217.93	-220.41	6.00	-3.28	49.19
3,600.00	4.97	19.73	3,579.15	290.14	-217.76	-220.29	6.00	-0.43	68.62
3,650.00	6.36	47.11	3,628.91	294.06	-215.00	-217.56	6.00	2.78	54.76
3,700.00	8.61	62.54	3,678.48	297.67	-209.65	-212.24	6.00	4.50	30.87
3,750.00	11.22	71.26	3,727.74	300.96	-201.72	-204.34	6.00	5.21	17.43
3,770.70	12.35	73.78	3,748.00	302.23	-197.69	-200.32	6.00	5.46	12.17
GLORIETA									
3,800.00	13.98	76.65	3,776.53	303.92	-191.23	-193.88	6.00	5.57	9.80
3,806.67	14.36	77.21	3,783.00	304.29	-189.64	-192.29	6.00	5.63	8.45



Planning Report



Database:	WBDS_SQL_3	Local Co-ordinate Reference:	Well 001H
Company:	Longfellow Energy	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Project:	Eddy Co., NM (Nad-83)	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site:	OZZY FEDERAL COM 1817DX	North Reference:	Grid
Well:	001H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
PADDOCK									
3,850.00	16.83	80.27	3,824.73	306.54	-178.22	-180.89	6.00	5.69	7.05
3,900.00	19.71	82.86	3,872.20	308.81	-162.72	-165.41	6.00	5.78	5.18
3,950.00	22.63	84.81	3,918.82	310.73	-144.76	-147.47	6.00	5.83	3.90
4,000.00	25.57	86.33	3,964.46	312.29	-124.41	-127.13	6.00	5.87	3.05
4,050.00	28.51	87.56	4,008.99	313.49	-101.72	-104.45	6.00	5.90	2.46
4,100.00	31.47	88.58	4,052.29	314.32	-76.74	-79.48	6.00	5.91	2.03
4,150.00	34.43	89.44	4,094.24	314.78	-49.55	-52.30	6.00	5.93	1.71
4,200.00	37.40	90.17	4,134.73	314.88	-20.23	-22.97	6.00	5.94	1.47
4,250.00	40.38	90.82	4,173.65	314.60	11.16	8.41	6.00	5.95	1.29
4,300.00	43.35	91.38	4,210.88	313.96	44.52	41.78	6.00	5.95	1.14
4,307.07	43.77	91.46	4,216.00	313.84	49.38	46.64	6.00	5.95	1.07
BLINEBRY									
4,350.00	46.33	91.89	4,246.33	312.94	79.76	77.02	6.00	5.96	1.01
4,400.00	49.31	92.36	4,279.90	311.57	116.78	114.05	6.00	5.96	0.92
4,450.00	52.29	92.78	4,311.50	309.83	155.48	152.77	6.00	5.96	0.84
4,500.00	55.28	93.17	4,341.04	307.73	195.76	193.07	6.00	5.97	0.78
4,550.00	58.26	93.53	4,368.43	305.29	237.51	234.84	6.00	5.97	0.72
4,579.13	60.00	93.73	4,383.38	303.71	262.46	259.80	6.00	5.97	0.69
4,600.00	60.00	93.73	4,393.81	302.53	280.50	277.85	0.00	0.00	0.00
4,700.00	60.00	93.73	4,443.81	296.90	366.92	364.31	0.00	0.00	0.00
4,779.13	60.00	93.73	4,483.38	292.44	435.30	432.73	0.00	0.00	0.00
4,800.00	62.09	93.73	4,493.48	291.25	453.52	450.96	10.00	10.00	0.00
4,850.00	67.09	93.73	4,514.93	288.32	498.57	496.04	10.00	10.00	0.00
4,900.00	72.09	93.73	4,532.37	285.27	545.32	542.81	10.00	10.00	0.00
4,950.00	77.09	93.73	4,545.65	282.14	593.40	590.92	10.00	10.00	0.00
5,000.00	82.09	93.73	4,554.69	278.94	642.46	640.00	10.00	10.00	0.00
5,050.00	87.09	93.73	4,559.40	275.70	692.12	689.68	10.00	10.00	0.00
5,066.32	88.72	93.73	4,560.00	274.64	708.39	705.97	10.00	10.00	0.00
1817DX 001H FTP									
5,100.00	88.72	93.73	4,560.75	272.45	741.99	739.58	0.00	0.00	0.00
5,200.00	88.72	93.73	4,562.99	265.95	841.75	839.40	0.00	0.00	0.00
5,300.00	88.72	93.73	4,565.22	259.45	941.52	939.22	0.00	0.00	0.00
5,400.00	88.72	93.73	4,567.46	252.95	1,041.28	1,039.03	0.00	0.00	0.00
5,500.00	88.72	93.73	4,569.70	246.44	1,141.04	1,138.85	0.00	0.00	0.00
5,600.00	88.72	93.73	4,571.93	239.94	1,240.81	1,238.67	0.00	0.00	0.00
5,700.00	88.72	93.73	4,574.17	233.44	1,340.57	1,338.48	0.00	0.00	0.00
5,800.00	88.72	93.73	4,576.40	226.94	1,440.33	1,438.30	0.00	0.00	0.00
5,900.00	88.72	93.73	4,578.64	220.44	1,540.10	1,538.11	0.00	0.00	0.00
6,000.00	88.72	93.73	4,580.88	213.93	1,639.86	1,637.93	0.00	0.00	0.00
6,100.00	88.72	93.73	4,583.11	207.43	1,739.62	1,737.75	0.00	0.00	0.00
6,200.00	88.72	93.73	4,585.35	200.93	1,839.39	1,837.56	0.00	0.00	0.00
6,300.00	88.72	93.73	4,587.58	194.43	1,939.15	1,937.38	0.00	0.00	0.00
6,400.00	88.72	93.73	4,589.82	187.92	2,038.91	2,037.20	0.00	0.00	0.00
6,500.00	88.72	93.73	4,592.06	181.42	2,138.68	2,137.01	0.00	0.00	0.00
6,542.25	88.72	93.73	4,593.00	178.67	2,180.83	2,179.19	0.00	0.00	0.00
1817DX 001H ITP									
6,600.00	88.77	92.57	4,594.27	175.50	2,238.47	2,236.86	2.00	0.08	-2.00
6,700.00	88.85	90.58	4,596.35	172.75	2,338.41	2,336.81	2.00	0.08	-2.00
6,734.06	88.88	89.90	4,597.02	172.61	2,372.46	2,370.86	2.00	0.08	-2.00
6,800.00	88.88	89.90	4,598.31	172.73	2,438.39	2,436.79	0.00	0.00	0.00
6,900.00	88.88	89.90	4,600.27	172.91	2,538.37	2,536.76	0.00	0.00	0.00
7,000.00	88.88	89.90	4,602.23	173.10	2,638.35	2,636.74	0.00	0.00	0.00



Planning Report



Database:	WBDS_SQL_3	Local Co-ordinate Reference:	Well 001H
Company:	Longfellow Energy	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Project:	Eddy Co., NM (Nad-83)	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site:	OZZY FEDERAL COM 1817DX	North Reference:	Grid
Well:	001H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
7,100.00	88.88	89.90	4,604.19	173.28	2,738.33	2,736.72	0.00	0.00	0.00	
7,200.00	88.88	89.90	4,606.15	173.46	2,838.31	2,836.69	0.00	0.00	0.00	
7,300.00	88.88	89.90	4,608.10	173.64	2,938.29	2,936.67	0.00	0.00	0.00	
7,400.00	88.88	89.90	4,610.06	173.83	3,038.27	3,036.64	0.00	0.00	0.00	
7,500.00	88.88	89.90	4,612.02	174.01	3,138.25	3,136.62	0.00	0.00	0.00	
7,600.00	88.88	89.90	4,613.98	174.19	3,238.24	3,236.59	0.00	0.00	0.00	
7,700.00	88.88	89.90	4,615.94	174.37	3,338.22	3,336.57	0.00	0.00	0.00	
7,800.00	88.88	89.90	4,617.89	174.56	3,438.20	3,436.54	0.00	0.00	0.00	
7,900.00	88.88	89.90	4,619.85	174.74	3,538.18	3,536.52	0.00	0.00	0.00	
8,000.00	88.88	89.90	4,621.81	174.92	3,638.16	3,636.49	0.00	0.00	0.00	
8,100.00	88.88	89.90	4,623.77	175.10	3,738.14	3,736.47	0.00	0.00	0.00	
8,200.00	88.88	89.90	4,625.73	175.29	3,838.12	3,836.44	0.00	0.00	0.00	
8,300.00	88.88	89.90	4,627.68	175.47	3,938.10	3,936.42	0.00	0.00	0.00	
8,400.00	88.88	89.90	4,629.64	175.65	4,038.08	4,036.39	0.00	0.00	0.00	
8,500.00	88.88	89.90	4,631.60	175.83	4,138.06	4,136.37	0.00	0.00	0.00	
8,600.00	88.88	89.90	4,633.56	176.01	4,238.04	4,236.34	0.00	0.00	0.00	
8,700.00	88.88	89.90	4,635.51	176.20	4,338.02	4,336.32	0.00	0.00	0.00	
8,800.00	88.88	89.90	4,637.47	176.38	4,438.00	4,436.29	0.00	0.00	0.00	
8,900.00	88.88	89.90	4,639.43	176.56	4,537.98	4,536.27	0.00	0.00	0.00	
9,000.00	88.88	89.90	4,641.39	176.74	4,637.96	4,636.25	0.00	0.00	0.00	
9,100.00	88.88	89.90	4,643.35	176.93	4,737.95	4,736.22	0.00	0.00	0.00	
9,200.00	88.88	89.90	4,645.30	177.11	4,837.93	4,836.20	0.00	0.00	0.00	
9,300.00	88.88	89.90	4,647.26	177.29	4,937.91	4,936.17	0.00	0.00	0.00	
9,400.00	88.88	89.90	4,649.22	177.47	5,037.89	5,036.15	0.00	0.00	0.00	
9,500.00	88.88	89.90	4,651.18	177.66	5,137.87	5,136.12	0.00	0.00	0.00	
9,600.00	88.88	89.90	4,653.14	177.84	5,237.85	5,236.10	0.00	0.00	0.00	
9,700.00	88.88	89.90	4,655.09	178.02	5,337.83	5,336.07	0.00	0.00	0.00	
9,800.00	88.88	89.90	4,657.05	178.20	5,437.81	5,436.05	0.00	0.00	0.00	
9,900.00	88.88	89.90	4,659.01	178.39	5,537.79	5,536.02	0.00	0.00	0.00	
10,000.00	88.88	89.90	4,660.97	178.57	5,637.77	5,636.00	0.00	0.00	0.00	
10,100.00	88.88	89.90	4,662.93	178.75	5,737.75	5,735.97	0.00	0.00	0.00	
10,200.00	88.88	89.90	4,664.88	178.93	5,837.73	5,835.95	0.00	0.00	0.00	
10,300.00	88.88	89.90	4,666.84	179.12	5,937.71	5,935.92	0.00	0.00	0.00	
10,400.00	88.88	89.90	4,668.80	179.30	6,037.69	6,035.90	0.00	0.00	0.00	
10,500.00	88.88	89.90	4,670.76	179.48	6,137.67	6,135.87	0.00	0.00	0.00	
10,600.00	88.88	89.90	4,672.71	179.66	6,237.66	6,235.85	0.00	0.00	0.00	
10,700.00	88.88	89.90	4,674.67	179.84	6,337.64	6,335.83	0.00	0.00	0.00	
10,800.00	88.88	89.90	4,676.63	180.03	6,437.62	6,435.80	0.00	0.00	0.00	
10,900.00	88.88	89.90	4,678.59	180.21	6,537.60	6,535.78	0.00	0.00	0.00	
11,000.00	88.88	89.90	4,680.55	180.39	6,637.58	6,635.75	0.00	0.00	0.00	
11,100.00	88.88	89.90	4,682.50	180.57	6,737.56	6,735.73	0.00	0.00	0.00	
11,200.00	88.88	89.90	4,684.46	180.76	6,837.54	6,835.70	0.00	0.00	0.00	
11,300.00	88.88	89.90	4,686.42	180.94	6,937.52	6,935.68	0.00	0.00	0.00	
11,400.00	88.88	89.90	4,688.38	181.12	7,037.50	7,035.65	0.00	0.00	0.00	
11,500.00	88.88	89.90	4,690.34	181.30	7,137.48	7,135.63	0.00	0.00	0.00	
11,600.00	88.88	89.90	4,692.29	181.49	7,237.46	7,235.60	0.00	0.00	0.00	
11,700.00	88.88	89.90	4,694.25	181.67	7,337.44	7,335.58	0.00	0.00	0.00	
11,800.00	88.88	89.90	4,696.21	181.85	7,437.42	7,435.55	0.00	0.00	0.00	
11,900.00	88.88	89.90	4,698.17	182.03	7,537.40	7,535.53	0.00	0.00	0.00	
12,000.00	88.88	89.90	4,700.13	182.22	7,637.38	7,635.50	0.00	0.00	0.00	
12,100.00	88.88	89.90	4,702.08	182.40	7,737.37	7,735.48	0.00	0.00	0.00	
12,200.00	88.88	89.90	4,704.04	182.58	7,837.35	7,835.45	0.00	0.00	0.00	
12,300.00	88.88	89.90	4,706.00	182.76	7,937.33	7,935.43	0.00	0.00	0.00	
12,400.00	88.88	89.90	4,707.96	182.95	8,037.31	8,035.40	0.00	0.00	0.00	



Planning Report



Database:	WBDS_SQL_3	Local Co-ordinate Reference:	Well 001H
Company:	Longfellow Energy	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Project:	Eddy Co., NM (Nad-83)	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site:	OZZY FEDERAL COM 1817DX	North Reference:	Grid
Well:	001H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,500.00	88.88	89.90	4,709.91	183.13	8,137.29	8,135.38	0.00	0.00	0.00
12,600.00	88.88	89.90	4,711.87	183.31	8,237.27	8,235.36	0.00	0.00	0.00
12,700.00	88.88	89.90	4,713.83	183.49	8,337.25	8,335.33	0.00	0.00	0.00
12,800.00	88.88	89.90	4,715.79	183.67	8,437.23	8,435.31	0.00	0.00	0.00
12,900.00	88.88	89.90	4,717.75	183.86	8,537.21	8,535.28	0.00	0.00	0.00
13,000.00	88.88	89.90	4,719.70	184.04	8,637.19	8,635.26	0.00	0.00	0.00
13,100.00	88.88	89.90	4,721.66	184.22	8,737.17	8,735.23	0.00	0.00	0.00
13,200.00	88.88	89.90	4,723.62	184.40	8,837.15	8,835.21	0.00	0.00	0.00
13,300.00	88.88	89.90	4,725.58	184.59	8,937.13	8,935.18	0.00	0.00	0.00
13,400.00	88.88	89.90	4,727.54	184.77	9,037.11	9,035.16	0.00	0.00	0.00
13,500.00	88.88	89.90	4,729.49	184.95	9,137.09	9,135.13	0.00	0.00	0.00
13,600.00	88.88	89.90	4,731.45	185.13	9,237.08	9,235.11	0.00	0.00	0.00
13,700.00	88.88	89.90	4,733.41	185.32	9,337.06	9,335.08	0.00	0.00	0.00
13,800.00	88.88	89.90	4,735.37	185.50	9,437.04	9,435.06	0.00	0.00	0.00
13,900.00	88.88	89.90	4,737.33	185.68	9,537.02	9,535.03	0.00	0.00	0.00
14,000.00	88.88	89.90	4,739.28	185.86	9,637.00	9,635.01	0.00	0.00	0.00
14,100.00	88.88	89.90	4,741.24	186.05	9,736.98	9,734.98	0.00	0.00	0.00
14,200.00	88.88	89.90	4,743.20	186.23	9,836.96	9,834.96	0.00	0.00	0.00
14,300.00	88.88	89.90	4,745.16	186.41	9,936.94	9,934.93	0.00	0.00	0.00
14,400.00	88.88	89.90	4,747.11	186.59	10,036.92	10,034.91	0.00	0.00	0.00
14,500.00	88.88	89.90	4,749.07	186.78	10,136.90	10,134.89	0.00	0.00	0.00
14,600.00	88.88	89.90	4,751.03	186.96	10,236.88	10,234.86	0.00	0.00	0.00
14,700.00	88.88	89.90	4,752.99	187.14	10,336.86	10,334.84	0.00	0.00	0.00
14,800.00	88.88	89.90	4,754.95	187.32	10,436.84	10,434.81	0.00	0.00	0.00
14,900.00	88.88	89.90	4,756.90	187.50	10,536.82	10,534.79	0.00	0.00	0.00
15,007.06	88.88	89.90	4,759.00	187.70	10,643.86	10,641.82	0.00	0.00	0.00
1817DX 001H LTP									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
1817DX 001H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	665,492.65	605,826.77	32.829290	-104.123384
1817DX 001H FTP - plan hits target center - Point	0.00	0.00	4,560.00	274.64	708.39	665,767.29	606,535.16	32.830041	-104.121076
1817DX 001H ITP - plan hits target center - Point	0.00	0.00	4,593.00	178.67	2,180.83	665,671.32	608,007.60	32.829769	-104.116283
1817DX 001H LTP - plan hits target center - Point	0.00	0.00	4,759.00	187.70	10,643.86	665,680.35	616,470.63	32.829743	-104.088731



Planning Report



Database:	WBDS_SQL_3	Local Co-ordinate Reference:	Well 001H
Company:	Longfellow Energy	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Project:	Eddy Co., NM (Nad-83)	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site:	OZZY FEDERAL COM 1817DX	North Reference:	Grid
Well:	001H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,640.66	1,633.00	QUEEN		0.000	
	2,049.46	2,039.00	GRAYBURG		0.000	
	2,365.62	2,353.00	SAN ANDRES		0.000	
	3,770.70	3,748.00	GLORIETA		0.000	
	3,806.67	3,783.00	PADDOCK		0.000	
	4,307.07	4,216.00	BLINEBRY		0.000	



Longfellow Energy

Eddy Co., NM (Nad-83)

OZZY FEDERAL COM 18' 'D.
001H

OH

PLAN #1

Anticollision Report

06 November, 2023





Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference	PLAN #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 50.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 500.00usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	11/06/23		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	15,007.06	PLAN #1 (OH)	MWD+IFR1+SAG+FDIR	OWSG MWD + IFR1 + Sag + FDIR Correction	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
OZZY FEDERAL COM 1817DX						
002H - OH - PLAN #1	300.00	300.00	20.01	18.00	9.979	CC, ES
002H - OH - PLAN #1	400.00	399.51	22.47	19.76	8.293	SF
OFFSET: AID STATE #003 - Wellbore #1 - Wellbore #1	4,603.55	4,365.88	212.60	110.50	2.082	CC, ES, SF
OFFSET: EMPIRE 18 FEDERAL #005 - Wellbore #1 - IN						Out of range
OFFSET: EMPIRE 18 FEDERAL 4 - Wellbore #1 - Wellb						Out of range
OFFSET: EMPIRE 18 STATE #003 - Wellbore #1 - INC-C						Out of range
OFFSET: EMPIRE 18 STATE #006 - Wellbore #1 - INC-C	9,483.85	4,500.00	142.27	3.52	1.025	Level 3, CC, ES, SF
OFFSET: EMPIRE 18 STATE #009 - Wellbore #1 - INC-C	9,487.49	4,567.89	261.53	111.43	1.742	CC, ES, SF
OFFSET: FOLK STATE 1 - Wellbore #1 - Wellbore #1	10,807.00	4,589.98	227.32	62.51	1.379	Level 3, CC, ES, SF
OFFSET: FOLK STATE 2 - Wellbore #1 - Wellbore #1						Out of range
OFFSET: FOLK STATE 3 - Wellbore #1 - Wellbore #1	10,146.02	4,571.98	126.85	-32.02	0.798	Level 3, CC, ES, SF
OFFSET: FOLK STATE 4 - Wellbore #1 - Wellbore #1						Out of range
OFFSET: GREEN B FEDERAL 12 - Wellbore #1 - Wellb	7,504.40	4,542.18	128.82	-0.20	0.998	Level 3, CC, ES, SF
OFFSET: MUSKEGON 17 FEDERAL COM #002 - Wellb	14,447.29	4,627.08	207.87	-0.03	1.000	Level 3, CC
OFFSET: MUSKEGON 17 FEDERAL COM #002 - Wellb	14,450.00	4,627.13	207.89	-0.04	1.000	Level 3, ES, SF
OFFSET: MUSKEGON 17 STATE COM 1 - Wellbore #1	11,972.00	4,591.41	94.29	-84.04	0.529	Level 3, CC, ES, SF
OFFSET: PHILLIPS 17 FEDERAL 1 - Wellbore #1 - Well	14,116.65	4,624.20	122.70	-86.85	0.586	Level 3, CC, ES, SF
OFFSET: PHILLIPS 17 FEDERAL 2 - Wellbore #1 - Well	12,795.35	4,517.00	149.54	-11.91	0.926	Level 3, CC, ES, SF

Offset Design: OZZY FEDERAL COM 1817DX - 002H - OH - PLAN #1												
Survey Program: 0-MWD+IFR1+SAG+FDIR												
Rule Assigned:												
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
0.00	0.00	0.00	0.00	0.00	0.00	179.886	-20.01	0.04	20.01			
50.00	50.00	50.00	50.00	0.11	0.14	179.886	-20.01	0.04	20.01	19.76	0.25	80.259
100.00	100.00	100.00	100.00	0.29	0.29	179.886	-20.01	0.04	20.01	19.44	0.57	35.019
150.00	150.00	150.00	150.00	0.46	0.46	179.886	-20.01	0.04	20.01	19.08	0.93	21.519
200.00	200.00	200.00	200.00	0.64	0.64	179.886	-20.01	0.04	20.01	18.72	1.29	15.532
250.00	250.00	250.00	250.00	0.82	0.82	179.886	-20.01	0.04	20.01	18.36	1.65	12.151
300.00	300.00	300.00	300.00	1.00	1.00	179.886	-20.01	0.04	20.01	18.00	2.01	9.979 CC, ES
350.00	350.00	349.78	349.78	1.18	1.17	-142.444	-20.28	-0.30	20.62	18.27	2.36	8.751
400.00	399.98	399.51	399.49	1.36	1.35	-141.843	-21.07	-1.32	22.47	19.76	2.71	8.293 SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - 002H - OH - PLAN #1

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program:		Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
450.00	449.93	449.15	449.09	1.54	1.52	-141.030	-22.40	-3.02	25.54	22.48	3.06	8.345			
500.00	499.84	498.66	498.50	1.72	1.69	-140.167	-24.25	-5.39	29.84	26.43	3.41	8.747			
550.00	549.68	547.99	547.68	1.90	1.86	-139.356	-26.61	-8.42	35.37	31.60	3.77	9.393			
600.00	599.45	597.09	596.56	2.08	2.04	-138.641	-29.48	-12.10	42.11	38.00	4.12	10.227			
650.00	649.13	646.39	645.57	2.27	2.21	-138.262	-32.71	-16.24	49.87	45.40	4.47	11.147			
700.00	698.79	695.75	694.66	2.44	2.38	-138.173	-35.96	-20.40	57.80	52.97	4.82	11.980			
750.00	748.45	745.12	743.74	2.62	2.56	-138.106	-39.20	-24.56	65.73	60.55	5.18	12.697			
800.00	798.11	794.49	792.83	2.80	2.73	-138.054	-42.45	-28.72	73.66	68.13	5.53	13.324			
850.00	847.76	843.85	841.91	2.98	2.91	-138.011	-45.70	-32.88	81.59	75.71	5.88	13.872			
900.00	897.42	893.22	890.99	3.16	3.09	-137.976	-48.94	-37.05	89.52	83.29	6.24	14.356			
950.00	947.08	942.59	940.08	3.34	3.27	-137.947	-52.19	-41.21	97.45	90.86	6.59	14.786			
1,000.00	996.74	991.96	989.16	3.52	3.45	-137.922	-55.44	-45.37	105.38	98.44	6.95	15.174			
1,050.00	1,046.39	1,041.32	1,038.25	3.70	3.63	-137.901	-58.68	-49.53	113.31	106.01	7.30	15.521			
1,100.00	1,096.05	1,090.69	1,087.33	3.88	3.81	-137.883	-61.93	-53.69	121.24	113.59	7.66	15.836			
1,150.00	1,145.71	1,140.06	1,136.41	4.07	3.99	-137.866	-65.18	-57.86	129.17	121.16	8.01	16.122			
1,200.00	1,195.36	1,189.42	1,185.50	4.25	4.17	-137.852	-68.42	-62.02	137.10	128.74	8.37	16.383			
1,250.00	1,245.02	1,238.79	1,234.58	4.43	4.35	-137.839	-71.67	-66.18	145.04	136.31	8.73	16.622			
1,300.00	1,294.68	1,288.16	1,283.67	4.61	4.53	-137.828	-74.92	-70.34	152.97	143.88	9.08	16.843			
1,350.00	1,344.34	1,337.52	1,332.75	4.79	4.71	-137.817	-78.16	-74.50	160.90	151.46	9.44	17.046			
1,400.00	1,393.99	1,386.89	1,381.83	4.97	4.89	-137.808	-81.41	-78.66	168.83	159.03	9.80	17.234			
1,450.00	1,443.65	1,436.26	1,430.92	5.16	5.07	-137.799	-84.66	-82.83	176.76	166.60	10.15	17.408			
1,500.00	1,493.31	1,485.63	1,480.00	5.34	5.25	-137.792	-87.90	-86.99	184.69	174.18	10.51	17.571			
1,550.00	1,542.97	1,534.99	1,529.09	5.52	5.44	-137.784	-91.15	-91.15	192.62	181.75	10.87	17.722			
1,600.00	1,592.62	1,584.36	1,578.17	5.70	5.62	-137.778	-94.40	-95.31	200.55	189.32	11.23	17.864			
1,650.00	1,642.28	1,633.73	1,627.25	5.89	5.80	-137.772	-97.64	-99.47	208.48	196.90	11.58	17.997			
1,700.00	1,691.94	1,683.09	1,676.34	6.07	5.98	-137.766	-100.89	-103.63	216.41	204.47	11.94	18.122			
1,750.00	1,741.59	1,732.46	1,725.42	6.25	6.16	-137.761	-104.14	-107.80	224.34	212.04	12.30	18.239			
1,800.00	1,791.25	1,781.83	1,774.51	6.43	6.34	-137.756	-107.38	-111.96	232.27	219.62	12.66	18.350			
1,850.00	1,840.91	1,831.20	1,823.59	6.61	6.52	-137.751	-110.63	-116.12	240.20	227.19	13.02	18.454			
1,900.00	1,890.57	1,880.56	1,872.67	6.80	6.70	-137.747	-113.88	-120.28	248.13	234.76	13.37	18.553			
1,950.00	1,940.22	1,929.93	1,921.76	6.98	6.89	-137.743	-117.13	-124.44	256.07	242.33	13.73	18.647			
2,000.00	1,989.88	1,979.30	1,970.84	7.16	7.07	-137.739	-120.37	-128.61	264.00	249.91	14.09	18.735			
2,050.00	2,039.54	2,028.66	2,019.93	7.34	7.25	-137.736	-123.62	-132.77	271.93	257.48	14.45	18.819			
2,100.00	2,089.20	2,078.03	2,069.01	7.53	7.43	-137.732	-126.87	-136.93	279.86	265.05	14.81	18.900			
2,150.00	2,138.85	2,127.40	2,118.09	7.71	7.61	-137.729	-130.11	-141.09	287.79	272.62	15.17	18.976			
2,200.00	2,188.51	2,176.76	2,167.18	7.89	7.79	-137.726	-133.36	-145.25	295.72	280.19	15.52	19.048			
2,250.00	2,238.17	2,226.13	2,216.26	8.07	7.98	-137.723	-136.61	-149.41	303.65	287.77	15.88	19.118			
2,300.00	2,287.83	2,275.50	2,265.35	8.25	8.16	-137.721	-139.85	-153.58	311.58	295.34	16.24	19.184			
2,350.00	2,337.48	2,324.87	2,314.43	8.44	8.34	-137.718	-143.10	-157.74	319.51	302.91	16.60	19.247			
2,400.00	2,387.14	2,374.23	2,363.51	8.62	8.52	-137.716	-146.35	-161.90	327.44	310.48	16.96	19.308			
2,450.00	2,436.80	2,423.60	2,412.60	8.80	8.70	-137.713	-149.59	-166.06	335.37	318.05	17.32	19.366			
2,500.00	2,486.45	2,472.97	2,461.68	8.98	8.88	-137.711	-152.84	-170.22	343.30	325.63	17.68	19.422			
2,550.00	2,536.11	2,522.33	2,510.77	9.17	9.07	-137.709	-156.09	-174.38	351.23	333.20	18.03	19.475			
2,600.00	2,585.77	2,571.70	2,559.85	9.35	9.25	-137.707	-159.33	-178.55	359.16	340.77	18.39	19.526			
2,650.00	2,635.43	2,621.07	2,608.93	9.53	9.43	-137.705	-162.58	-182.71	367.10	348.34	18.75	19.576			
2,700.00	2,685.08	2,670.43	2,658.02	9.71	9.61	-137.703	-165.83	-186.87	375.03	355.91	19.11	19.623			
2,750.00	2,734.74	2,719.80	2,707.10	9.90	9.79	-137.701	-169.07	-191.03	382.96	363.49	19.47	19.669			
2,800.00	2,784.40	2,769.17	2,756.19	10.08	9.98	-137.700	-172.32	-195.19	390.89	371.06	19.83	19.713			
2,850.00	2,834.06	2,818.54	2,805.27	10.26	10.16	-137.698	-175.57	-199.36	398.82	378.63	20.19	19.755			
2,900.00	2,883.71	2,867.90	2,854.35	10.44	10.34	-137.697	-178.81	-203.52	406.75	386.20	20.55	19.796			
2,950.00	2,933.37	2,917.27	2,903.44	10.63	10.52	-137.695	-182.06	-207.68	414.68	393.77	20.91	19.836			
3,000.00	2,983.03	2,966.64	2,952.52	10.81	10.70	-137.694	-185.31	-211.84	422.61	401.35	21.26	19.874			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

11/06/23 11:27:43AM

Page 3

COMPASS 5000.17 Build



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - 002H - OH - PLAN #1

Survey Program: Reference		0-MWD+IFR1+SAG+FDIR						Rule Assigned:				Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-/S (usft)	+E-/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,050.00	3,032.68	3,017.28	3,002.90	10.99	10.89	-137.736	-188.63	-215.78	430.51	408.87	21.63	19.902	
3,100.00	3,082.34	3,069.22	3,054.70	11.17	11.07	-138.099	-191.95	-217.39	438.15	416.14	22.00	19.913	
3,150.00	3,132.00	3,120.81	3,106.18	11.35	11.25	-138.807	-195.14	-216.19	445.54	423.18	22.36	19.923	
3,200.00	3,181.66	3,171.76	3,156.88	11.54	11.42	-139.828	-198.19	-212.28	452.78	430.07	22.71	19.935	
3,250.00	3,231.31	3,221.79	3,206.40	11.72	11.58	-141.125	-201.06	-205.81	460.00	436.95	23.05	19.956	
3,300.00	3,280.97	3,270.67	3,254.40	11.90	11.73	-142.660	-203.75	-196.99	467.36	443.98	23.38	19.991	
3,350.00	3,330.63	3,318.19	3,300.57	12.08	11.87	-144.389	-206.25	-186.07	475.04	451.35	23.69	20.051	
3,400.00	3,380.29	3,364.18	3,344.69	12.27	12.01	-146.270	-208.54	-173.33	483.24	459.25	23.99	20.144	
3,450.00	3,429.94	3,408.50	3,386.60	12.45	12.14	-148.260	-210.64	-159.04	492.17	467.90	24.27	20.281	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: AID STATE #003 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 260-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	30.30	0.00	0.00	71.515	90.18	269.76	286.04				
50.00	50.00	19.70	50.00	0.11	0.18	71.515	90.18	269.76	284.43	284.15	0.29	985.113	
100.00	100.00	69.70	100.00	0.29	0.64	71.515	90.18	269.76	284.43	283.50	0.93	305.822	
150.00	150.00	119.70	150.00	0.46	1.11	71.515	90.18	269.76	284.43	282.86	1.57	181.007	
200.00	200.00	169.70	200.00	0.64	1.57	71.515	90.18	269.76	284.43	282.22	2.21	128.544	
250.00	250.00	219.70	250.00	0.82	2.03	71.515	90.18	269.76	284.43	281.58	2.85	99.659	
300.00	300.00	269.70	300.00	1.00	2.57	71.515	90.18	269.76	284.43	280.86	3.58	79.514	
350.00	350.00	319.70	350.00	1.18	3.46	109.041	90.18	269.76	284.58	279.94	4.64	61.347	
400.00	399.98	369.68	399.98	1.36	4.34	109.282	90.18	269.76	285.01	279.31	5.70	50.000	
450.00	449.93	419.63	449.93	1.54	5.22	109.680	90.18	269.76	285.73	278.97	6.76	42.264	
500.00	499.84	469.54	499.84	1.72	6.10	110.234	90.18	269.76	286.78	278.96	7.82	36.671	
550.00	549.68	519.40	549.70	1.90	6.99	110.836	90.72	269.76	288.31	279.43	8.88	32.468	
600.00	599.45	569.24	599.54	2.08	7.87	111.692	90.69	269.76	290.05	280.11	9.94	29.183	
650.00	649.13	618.99	649.28	2.27	8.75	112.699	90.61	269.76	292.17	281.17	11.00	26.567	
700.00	698.79	668.70	698.99	2.44	9.62	113.766	90.50	269.76	294.46	282.40	12.05	24.427	
750.00	748.45	718.40	748.69	2.62	10.50	114.824	90.33	269.76	296.84	283.73	13.11	22.639	
800.00	798.11	767.82	798.11	2.80	11.37	115.857	90.18	269.76	299.32	285.16	14.16	21.140	
850.00	847.76	817.47	847.76	2.98	12.23	116.849	90.18	269.76	301.93	286.74	15.19	19.872	
900.00	897.42	867.13	897.42	3.16	13.08	117.825	90.18	269.76	304.63	288.40	16.23	18.770	
950.00	947.08	916.79	947.08	3.34	13.94	118.783	90.18	269.76	307.41	290.15	17.27	17.805	
1,000.00	996.74	966.44	996.74	3.52	14.79	119.724	90.18	269.76	310.28	291.98	18.30	16.955	
1,050.00	1,046.39	1,016.10	1,046.39	3.70	15.65	120.647	90.18	269.76	313.24	293.90	19.34	16.199	
1,100.00	1,096.05	1,065.76	1,096.05	3.88	16.51	121.554	90.18	269.76	316.27	295.90	20.37	15.525	
1,150.00	1,145.71	1,115.42	1,145.71	4.07	17.36	122.443	90.18	269.76	319.38	297.98	21.41	14.919	
1,200.00	1,195.36	1,165.07	1,195.36	4.25	18.22	123.315	90.18	269.76	322.57	300.13	22.44	14.373	
1,250.00	1,245.02	1,214.73	1,245.02	4.43	19.07	124.169	90.18	269.76	325.83	302.35	23.48	13.878	
1,300.00	1,294.68	1,264.39	1,294.68	4.61	19.94	125.007	90.18	269.76	329.17	304.64	24.52	13.422	
1,350.00	1,344.34	1,314.05	1,344.34	4.79	20.82	125.828	90.18	269.76	332.57	306.99	25.58	12.999	
1,400.00	1,393.99	1,363.70	1,393.99	4.97	21.70	126.633	90.18	269.76	336.04	309.40	26.64	12.613	
1,450.00	1,443.65	1,413.36	1,443.65	5.16	22.58	127.420	90.18	269.76	339.57	311.87	27.70	12.259	
1,500.00	1,493.31	1,463.02	1,493.31	5.34	23.46	128.192	90.18	269.76	343.17	314.41	28.76	11.933	
1,550.00	1,542.97	1,512.68	1,542.97	5.52	24.33	128.948	90.18	269.76	346.83	317.01	29.82	11.632	
1,600.00	1,592.62	1,562.33	1,592.62	5.70	25.21	129.688	90.18	269.76	350.55	319.67	30.87	11.354	
1,650.00	1,642.28	1,611.99	1,642.28	5.89	26.09	130.412	90.18	269.76	354.32	322.39	31.93	11.096	
1,700.00	1,691.94	1,661.65	1,691.94	6.07	26.97	131.121	90.18	269.76	358.15	325.17	32.99	10.857	
1,750.00	1,741.59	1,711.30	1,741.59	6.25	27.85	131.815	90.18	269.76	362.04	327.99	34.05	10.633	
1,800.00	1,791.25	1,760.97	1,791.25	6.43	28.75	132.495	90.18	269.76	365.98	330.85	35.13	10.418	
1,850.00	1,840.91	1,810.63	1,840.91	6.61	29.69	133.159	90.18	269.76	369.96	333.72	36.24	10.208	
1,900.00	1,890.57	1,860.28	1,890.57	6.80	30.62	133.810	90.18	269.76	374.00	336.65	37.35	10.012	
1,950.00	1,940.22	1,909.94	1,940.22	6.98	31.55	134.447	90.18	269.76	378.08	339.62	38.47	9.829	
2,000.00	1,989.88	1,959.60	1,989.88	7.16	32.49	135.070	90.18	269.76	382.21	342.63	39.58	9.657	
2,050.00	2,039.54	2,009.23	2,039.51	7.34	33.42	135.604	90.70	269.76	386.31	345.62	40.69	9.493	
2,100.00	2,089.20	2,058.83	2,089.11	7.53	34.36	136.209	90.65	269.76	390.53	348.73	41.80	9.342	
2,150.00	2,138.85	2,108.42	2,138.70	7.71	35.29	136.806	90.56	269.76	394.80	351.88	42.92	9.199	
2,200.00	2,188.51	2,158.01	2,188.29	7.89	36.22	137.398	90.42	269.76	399.12	355.09	44.03	9.065	
2,250.00	2,238.17	2,207.59	2,237.87	8.07	37.15	137.982	90.23	269.76	403.49	358.35	45.14	8.939	
2,300.00	2,287.83	2,257.58	2,287.83	8.25	38.14	138.541	90.18	269.76	407.87	361.57	46.30	8.808	
2,350.00	2,337.48	2,307.24	2,337.48	8.44	39.13	139.077	90.18	269.76	412.28	364.80	47.48	8.684	
2,400.00	2,387.14	2,356.90	2,387.14	8.62	40.13	139.602	90.18	269.76	416.73	368.08	48.65	8.566	
2,450.00	2,436.80	2,406.56	2,436.80	8.80	41.12	140.115	90.18	269.76	421.21	371.38	49.82	8.454	
2,500.00	2,486.45	2,456.21	2,486.45	8.98	42.12	140.618	90.18	269.76	425.72	374.72	51.00	8.348	
2,550.00	2,536.11	2,505.71	2,535.94	9.17	43.11	140.978	91.19	269.76	430.03	377.86	52.17	8.243	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: AID STATE #003 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft	
Survey Program: 260-INC-ONLY		Reference		Offset		Semi Major Axis		Highside		Offset Wellbore Centre		Rule Assigned: Distance		Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
2,600.00	2,585.77	2,555.17	2,585.40	9.35	44.10	141.477	91.06	269.76	434.62	381.29	53.34	8.149			
2,650.00	2,635.43	2,604.63	2,634.85	9.53	45.09	141.976	90.85	269.76	439.28	384.77	54.51	8.059			
2,700.00	2,685.08	2,654.06	2,684.28	9.71	46.08	142.475	90.54	269.76	443.99	388.32	55.67	7.975			
2,750.00	2,734.74	2,704.57	2,734.74	9.90	47.10	142.980	90.18	269.76	448.75	391.87	56.87	7.890			
2,800.00	2,784.40	2,754.23	2,784.40	10.08	48.17	143.424	90.18	269.76	453.44	395.32	58.12	7.801			
2,850.00	2,834.06	2,803.89	2,834.06	10.26	49.24	143.858	90.18	269.76	458.16	398.79	59.37	7.717			
2,900.00	2,883.71	2,853.54	2,883.71	10.44	50.31	144.284	90.18	269.76	462.90	402.28	60.62	7.636			
2,950.00	2,933.37	2,903.20	2,933.37	10.63	51.38	144.701	90.18	269.76	467.67	405.80	61.87	7.559			
3,000.00	2,983.03	2,952.77	2,982.93	10.81	52.45	144.990	91.21	269.76	472.15	409.03	63.12	7.480			
3,050.00	3,032.68	3,002.16	3,032.32	10.99	53.52	145.399	91.13	269.76	476.98	412.62	64.36	7.411			
3,100.00	3,082.34	3,051.54	3,081.69	11.17	54.58	145.809	90.96	269.76	481.87	416.26	65.60	7.345			
3,150.00	3,132.00	3,100.90	3,131.05	11.35	55.65	146.221	90.71	269.76	486.81	419.96	66.85	7.282			
3,200.00	3,181.66	3,150.25	3,180.39	11.54	56.71	146.635	90.36	269.76	491.80	423.71	68.09	7.223			
3,250.00	3,231.31	3,201.26	3,231.31	11.72	57.86	147.034	90.18	269.76	496.76	427.34	69.42	7.156			
3,350.00	3,324.73	3,294.84	3,324.73	13.80	71.82	36.704	90.18	269.76	497.49	412.03	85.46	5.821			
3,900.00	3,872.20	3,842.31	3,872.20	13.96	72.96	35.578	90.18	269.76	484.60	397.85	86.75	5.586			
3,950.00	3,918.82	3,888.93	3,918.82	14.10	74.07	35.341	90.18	269.76	469.54	381.52	88.02	5.334			
4,000.00	3,964.46	3,934.40	3,964.27	14.25	75.16	35.610	91.94	269.76	451.59	362.32	89.26	5.059			
4,050.00	4,008.99	3,978.47	4,008.33	14.39	76.22	36.710	91.85	269.76	432.57	342.11	90.46	4.782			
4,100.00	4,052.29	4,021.32	4,051.18	14.53	77.24	38.433	91.68	269.76	411.86	320.23	91.63	4.495			
4,150.00	4,094.24	4,062.84	4,092.69	14.68	78.24	40.797	91.43	269.76	389.68	296.91	92.77	4.201			
4,200.00	4,134.73	4,102.91	4,132.76	14.82	79.20	43.842	91.11	269.76	366.29	272.42	93.87	3.902			
4,250.00	4,173.65	4,141.44	4,171.28	14.98	80.12	47.613	90.73	269.76	342.05	247.11	94.94	3.603			
4,300.00	4,210.88	4,178.30	4,208.13	15.14	81.00	52.145	90.29	269.76	317.44	221.47	95.97	3.308			
4,350.00	4,246.33	4,216.62	4,246.33	15.31	81.98	57.807	90.18	269.76	292.79	195.66	97.13	3.015			
4,400.00	4,279.90	4,250.19	4,279.90	15.48	82.85	63.835	90.18	269.76	269.10	170.92	98.18	2.741			
4,450.00	4,311.50	4,281.79	4,311.50	15.66	83.67	70.358	90.18	269.76	247.60	148.38	99.21	2.496			
4,500.00	4,341.04	4,311.33	4,341.04	15.85	84.43	77.070	90.18	269.76	229.79	129.58	100.22	2.293			
4,550.00	4,368.43	4,338.73	4,368.43	16.04	85.14	83.590	90.18	269.76	217.51	116.34	101.17	2.150			
4,600.00	4,393.81	4,364.11	4,393.81	16.24	85.80	89.583	90.18	269.76	212.62	110.58	102.04	2.084			
4,603.55	4,395.59	4,365.88	4,395.59	16.26	85.85	89.997	90.18	269.76	212.60	110.50	102.10	2.082 CC, ES, SF			
4,650.00	4,418.81	4,389.11	4,418.81	16.46	86.45	95.402	90.18	269.76	216.37	113.53	102.84	2.104			
4,700.00	4,443.81	4,414.11	4,443.81	16.68	87.10	101.111	90.18	269.76	228.41	124.87	103.54	2.206			
4,750.00	4,468.81	4,438.96	4,468.64	16.92	87.74	106.696	91.73	269.76	246.27	142.08	104.19	2.364			
4,800.00	4,493.48	4,463.37	4,493.05	17.17	88.37	110.610	91.70	269.76	271.28	166.50	104.78	2.589			
4,850.00	4,514.93	4,484.60	4,514.28	17.42	88.92	111.534	91.64	269.76	301.72	196.45	105.28	2.866			
4,900.00	4,532.37	4,501.87	4,531.55	17.68	89.37	110.727	91.58	269.76	336.83	231.16	105.67	3.188			
4,950.00	4,545.65	4,515.03	4,544.71	17.94	89.71	107.961	91.52	269.76	375.61	269.66	105.95	3.545			
5,000.00	4,554.69	4,524.00	4,553.67	18.20	89.94	102.931	91.47	269.76	417.20	311.08	106.12	3.931			
5,050.00	4,559.40	4,528.68	4,558.36	18.46	90.07	95.344	91.44	269.76	460.80	354.62	106.19	4.340			



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: EMPIRE 18 STATE #006 - Wellbore #1 - INC-ONLY													Offset Site Error:
													0.00 usft
Survey Program: 214-INC-ONLY													Offset Well Error:
													0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)			
9,050.00	4,642.37	4,500.00	4,588.78	55.83	91.67	-64.124	305.64	5,122.69	456.57	342.26	114.31	3.994	
9,100.00	4,643.35	4,500.00	4,588.78	56.37	91.67	-64.124	305.64	5,122.69	409.36	293.84	115.51	3.544	
9,150.00	4,644.33	4,500.00	4,588.78	56.91	91.67	-64.124	305.64	5,122.69	362.89	245.83	117.06	3.100	
9,200.00	4,645.30	4,500.00	4,588.78	57.45	91.67	-64.124	305.64	5,122.69	317.50	198.43	119.07	2.666	
9,250.00	4,646.28	4,500.00	4,588.78	57.99	91.67	-64.124	305.64	5,122.69	273.72	152.00	121.71	2.249	
9,300.00	4,647.26	4,500.00	4,588.78	58.53	91.67	-64.124	305.64	5,122.69	232.46	107.31	125.15	1.857	
9,350.00	4,648.24	4,500.00	4,588.78	59.07	91.67	-64.124	305.64	5,122.69	195.33	65.89	129.44	1.509	
9,400.00	4,649.22	4,500.00	4,588.78	59.61	91.67	-64.124	305.64	5,122.69	165.14	30.95	134.19	1.231	Level 3
9,450.00	4,650.20	4,500.00	4,588.78	60.15	91.67	-64.124	305.64	5,122.69	146.24	8.33	137.92	1.060	Level 3
9,483.85	4,650.86	4,500.00	4,588.78	60.52	91.67	-64.124	305.64	5,122.69	142.27	3.52	138.76	1.025	Level 3, CC, ES, SF
9,500.00	4,651.18	4,500.00	4,588.78	60.69	91.67	-64.124	305.64	5,122.69	143.19	4.66	138.53	1.034	Level 3
9,550.00	4,652.16	4,500.00	4,588.78	61.24	91.67	-64.124	305.64	5,122.69	156.91	21.24	135.66	1.157	Level 3
9,600.00	4,653.14	4,500.00	4,588.78	61.78	91.67	-64.124	305.64	5,122.69	183.67	52.51	131.17	1.400	Level 3
9,650.00	4,654.11	4,500.00	4,588.78	62.32	91.67	-64.124	305.64	5,122.69	218.75	91.95	126.80	1.725	
9,700.00	4,655.09	4,500.00	4,588.78	62.87	91.67	-64.124	305.64	5,122.69	258.78	135.57	123.21	2.100	
9,750.00	4,656.07	4,500.00	4,588.78	63.41	91.67	-64.124	305.64	5,122.69	301.80	181.37	120.44	2.506	
9,800.00	4,657.05	4,500.00	4,588.78	63.95	91.67	-64.124	305.64	5,122.69	346.70	228.38	118.32	2.930	
9,850.00	4,658.03	4,500.00	4,588.78	64.50	91.67	-64.124	305.64	5,122.69	392.83	276.12	116.71	3.366	
9,900.00	4,659.01	4,500.00	4,588.78	65.04	91.67	-64.124	305.64	5,122.69	439.81	324.34	115.47	3.809	
9,950.00	4,659.99	4,500.00	4,588.78	65.59	91.67	-64.124	305.64	5,122.69	487.39	372.89	114.51	4.256	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

11/06/23 11:27:43AM

Page 7

COMPASS 5000.17 Build



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: EMPIRE 18 STATE #009 - Wellbore #1 - INC-ONLY													Offset Site Error: 0.00 usft
Survey Program: 133-INC-ONLY							Rule Assigned:						Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,100.00	4,643.35	4,560.36	4,642.29	56.37	89.40	88.108	-83.86	5,125.86	467.43	344.02	123.41	3.788	
9,150.00	4,644.33	4,561.33	4,643.26	56.91	89.42	88.321	-83.86	5,125.86	426.91	300.64	126.27	3.381	
9,200.00	4,645.30	4,562.31	4,644.24	57.45	89.44	88.533	-83.87	5,125.86	388.61	259.00	129.61	2.998	
9,250.00	4,646.28	4,563.28	4,645.21	57.99	89.46	88.746	-83.87	5,125.86	353.24	219.79	133.44	2.647	
9,300.00	4,647.26	4,564.25	4,646.18	58.53	89.48	88.959	-83.87	5,125.86	321.77	184.09	137.68	2.337	
9,350.00	4,648.24	4,565.22	4,647.15	59.07	89.50	89.172	-83.88	5,125.86	295.45	153.39	142.06	2.080	
9,400.00	4,649.22	4,566.19	4,648.12	59.61	89.52	89.384	-83.88	5,125.86	275.77	129.68	146.09	1.888	
9,450.00	4,650.20	4,567.16	4,649.09	60.15	89.54	89.597	-83.89	5,125.86	264.20	115.17	149.02	1.773	
9,487.49	4,650.93	4,567.89	4,649.82	60.56	89.55	89.757	-83.89	5,125.86	261.53	111.43	150.10	1.742	CC, ES, SF
9,500.00	4,651.18	4,568.14	4,650.07	60.69	89.56	89.810	-83.89	5,125.86	261.82	111.62	150.21	1.743	
9,550.00	4,652.16	4,569.11	4,651.04	61.24	89.58	90.023	-83.89	5,125.86	268.89	119.47	149.41	1.800	
9,600.00	4,653.14	4,570.08	4,652.01	61.78	89.59	90.236	-83.90	5,125.86	284.69	137.68	147.01	1.937	
9,650.00	4,654.11	4,571.05	4,652.98	62.32	89.61	90.449	-83.90	5,125.86	307.89	164.22	143.67	2.143	
9,700.00	4,655.09	4,572.02	4,653.95	62.87	89.63	90.661	-83.91	5,125.86	336.95	196.92	140.03	2.406	
9,750.00	4,656.07	4,572.99	4,654.92	63.41	89.65	90.874	-83.91	5,125.86	370.51	234.00	136.51	2.714	
9,800.00	4,657.05	4,573.97	4,655.90	63.95	89.67	91.087	-83.92	5,125.86	407.46	274.15	133.30	3.057	
9,850.00	4,658.03	4,574.94	4,656.87	64.50	89.69	91.300	-83.92	5,125.86	446.94	316.47	130.48	3.425	
9,900.00	4,659.01	4,575.91	4,657.84	65.04	89.71	91.512	-83.92	5,125.86	488.36	360.33	128.03	3.814	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: FOLK STATE 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 295-INC-ONLY												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance		Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
10,400.00	4,668.80	4,581.96	4,669.93	70.51	89.69	-88.278	407.40	6,444.20	466.13	338.21	127.92	3.644	
10,450.00	4,669.78	4,582.95	4,670.92	71.06	89.71	-88.526	407.39	6,444.20	423.19	291.96	131.23	3.225	
10,500.00	4,670.76	4,583.93	4,671.90	71.60	89.73	-88.774	407.39	6,444.20	381.97	246.79	135.18	2.826	
10,550.00	4,671.74	4,584.92	4,672.89	72.15	89.75	-89.022	407.38	6,444.20	343.09	203.23	139.86	2.453	
10,600.00	4,672.71	4,585.90	4,673.87	72.70	89.77	-89.270	407.38	6,444.20	307.43	162.15	145.28	2.116	
10,650.00	4,673.69	4,586.89	4,674.86	73.25	89.79	-89.518	407.37	6,444.20	276.26	124.99	151.28	1.826	
10,700.00	4,674.67	4,587.87	4,675.84	73.80	89.81	-89.766	407.37	6,444.20	251.24	93.96	157.28	1.597	
10,750.00	4,675.65	4,588.86	4,676.82	74.35	89.83	-90.014	407.36	6,444.20	234.36	72.14	162.22	1.445	Level 3
10,800.00	4,676.63	4,589.84	4,677.81	74.90	89.84	-90.263	407.36	6,444.20	227.43	62.71	164.72	1.381	Level 3
10,807.00	4,676.77	4,589.98	4,677.95	74.97	89.85	-90.297	407.36	6,444.20	227.32	62.51	164.81	1.379	Level 3, CC, ES, SF
10,850.00	4,677.61	4,590.83	4,678.79	75.45	89.86	-90.511	407.35	6,444.20	231.34	67.41	163.94	1.411	Level 3
10,900.00	4,678.59	4,591.81	4,679.78	76.00	89.88	-90.759	407.35	6,444.20	245.59	85.30	160.29	1.532	
10,950.00	4,679.57	4,592.80	4,680.76	76.55	89.90	-91.007	407.34	6,444.20	268.53	113.48	155.05	1.732	
11,000.00	4,680.55	4,593.78	4,681.75	77.10	89.92	-91.255	407.34	6,444.20	298.16	148.74	149.42	1.995	
11,050.00	4,681.53	4,594.77	4,682.73	77.65	89.94	-91.503	407.33	6,444.20	332.70	188.57	144.13	2.308	
11,100.00	4,682.50	4,595.75	4,683.72	78.20	89.96	-91.751	407.32	6,444.20	370.78	231.29	139.49	2.658	
11,150.00	4,683.48	4,596.74	4,684.70	78.75	89.98	-91.999	407.32	6,444.20	411.41	275.89	135.52	3.036	
11,200.00	4,684.46	4,597.72	4,685.69	79.30	90.00	-92.247	407.31	6,444.20	453.92	321.74	132.18	3.434	
11,250.00	4,685.44	4,598.71	4,686.67	79.85	90.02	-92.495	407.31	6,444.20	497.82	368.44	129.38	3.848	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: FOLK STATE 3 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program:		Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Reference	Offset		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
9,700.00	4,655.09	4,563.24	4,655.09	62.87	90.99	-86.062			305.68	5,783.56	463.65	348.28	115.37	4.019	
9,750.00	4,656.07	4,564.22	4,656.07	63.41	91.00	-86.502			305.68	5,783.56	415.79	298.89	116.90	3.557	
9,800.00	4,657.05	4,565.20	4,657.05	63.95	91.02	-86.943			305.68	5,783.56	368.50	249.59	118.90	3.099	
9,850.00	4,658.03	4,566.18	4,658.03	64.50	91.04	-87.384			305.68	5,783.56	322.02	200.46	121.56	2.649	
9,900.00	4,659.01	4,567.16	4,659.01	65.04	91.06	-87.825			305.68	5,783.56	276.77	151.61	125.16	2.211	
9,950.00	4,659.99	4,568.14	4,659.99	65.59	91.07	-88.267			305.68	5,783.56	233.47	103.36	130.11	1.794	
10,000.00	4,660.97	4,569.12	4,660.97	66.13	91.09	-88.709			305.68	5,783.56	193.42	56.52	136.90	1.413	Level 3
10,050.00	4,661.95	4,570.10	4,661.95	66.68	91.11	-89.151			305.68	5,783.56	159.09	13.39	145.71	1.092	Level 3
10,100.00	4,662.93	4,571.08	4,662.93	67.23	91.13	-89.593			305.68	5,783.56	134.94	-19.89	154.83	0.872	Level 3
10,146.02	4,663.83	4,571.98	4,663.83	67.73	91.14	-90.000			305.68	5,783.56	126.85	-32.02	158.87	0.798	Level 3, CC, ES, SF
10,150.00	4,663.90	4,572.05	4,663.90	67.77	91.15	-90.035			305.68	5,783.56	126.91	-31.96	158.86	0.799	Level 3
10,200.00	4,664.88	4,573.03	4,664.88	68.32	91.16	-90.477			305.68	5,783.56	137.84	-16.30	154.14	0.894	Level 3
10,250.00	4,665.86	4,574.01	4,665.86	68.87	91.18	-90.919			305.68	5,783.56	163.99	18.80	145.18	1.130	Level 3
10,300.00	4,666.84	4,574.99	4,666.84	69.41	91.20	-91.361			305.68	5,783.56	199.46	62.56	136.89	1.457	Level 3
10,350.00	4,667.82	4,575.97	4,667.82	69.96	91.22	-91.803			305.68	5,783.56	240.15	109.58	130.57	1.839	
10,400.00	4,668.80	4,576.95	4,668.80	70.51	91.23	-92.244			305.68	5,783.56	283.83	157.87	125.96	2.253	
10,450.00	4,669.78	4,577.93	4,669.78	71.06	91.25	-92.686			305.68	5,783.56	329.31	206.70	122.60	2.686	
10,500.00	4,670.76	4,578.91	4,670.76	71.60	91.27	-93.127			305.68	5,783.56	375.93	255.80	120.13	3.129	
10,550.00	4,671.74	4,579.89	4,671.74	72.15	91.29	-93.567			305.68	5,783.56	423.33	305.06	118.27	3.579	
10,600.00	4,672.71	4,580.87	4,672.71	72.70	91.30	-94.007			305.68	5,783.56	471.26	354.41	116.85	4.033	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: GREEN B FEDERAL 12 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program:		Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,050.00	4,603.21	4,533.28	4,603.21	34.94	89.30	-86.050			302.83	3,142.43	472.24	364.42	107.81	4.380	
7,100.00	4,604.19	4,534.26	4,604.19	35.44	89.33	-86.483			302.83	3,142.43	424.36	315.94	108.43	3.914	
7,150.00	4,605.17	4,535.24	4,605.17	35.94	89.35	-86.917			302.83	3,142.43	377.03	267.80	109.24	3.451	
7,200.00	4,606.15	4,536.22	4,606.15	36.44	89.37	-87.351			302.83	3,142.43	330.49	220.15	110.35	2.995	
7,250.00	4,607.13	4,537.20	4,607.13	36.94	89.39	-87.786			302.83	3,142.43	285.12	173.24	111.89	2.548	
7,300.00	4,608.10	4,538.18	4,608.10	37.45	89.41	-88.221			302.83	3,142.43	241.58	127.51	114.08	2.118	
7,350.00	4,609.08	4,539.16	4,609.08	37.96	89.43	-88.656			302.83	3,142.43	201.07	83.87	117.20	1.716	
7,400.00	4,610.06	4,540.14	4,610.06	38.46	89.45	-89.091			302.83	3,142.43	165.81	44.38	121.43	1.366 Level 3	
7,450.00	4,611.04	4,541.11	4,611.04	38.97	89.48	-89.526			302.83	3,142.43	139.83	13.65	126.18	1.108 Level 3	
7,500.00	4,612.02	4,542.09	4,612.02	39.48	89.50	-89.962			302.83	3,142.43	128.89	-0.08	128.98	0.999 Level 3	
7,504.40	4,612.11	4,542.18	4,612.11	39.53	89.50	-90.000			302.83	3,142.43	128.82	-0.20	129.02	0.998 Level 3, CC, ES, SF	
7,550.00	4,613.00	4,543.07	4,613.00	40.00	89.52	-90.397			302.83	3,142.43	136.64	9.26	127.38	1.073 Level 3	
7,600.00	4,613.98	4,544.05	4,613.98	40.51	89.54	-90.832			302.83	3,142.43	160.40	37.30	123.09	1.303 Level 3	
7,650.00	4,614.96	4,545.03	4,614.96	41.03	89.56	-91.267			302.83	3,142.43	194.37	75.48	118.89	1.635	
7,700.00	4,615.94	4,546.01	4,615.94	41.54	89.58	-91.702			302.83	3,142.43	234.16	118.47	115.69	2.024	
7,750.00	4,616.91	4,546.99	4,616.91	42.06	89.60	-92.137			302.83	3,142.43	277.28	163.85	113.43	2.445	
7,800.00	4,617.89	4,547.97	4,617.89	42.58	89.63	-92.572			302.83	3,142.43	322.38	210.56	111.83	2.883	
7,850.00	4,618.87	4,548.95	4,618.87	43.10	89.65	-93.006			302.83	3,142.43	368.75	258.06	110.69	3.331	
7,900.00	4,619.85	4,549.92	4,619.85	43.62	89.67	-93.440			302.83	3,142.43	415.96	306.09	109.87	3.786	
7,950.00	4,620.83	4,550.90	4,620.83	44.14	89.69	-93.874			302.83	3,142.43	463.75	354.49	109.26	4.245	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: MUSKEGON 17 FEDERAL COM #002 - Wellbore #1 - INC-ONLY													Offset Site Error: 0.00 usft
Survey Program: 634-INC-ONLY													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance		Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
14,000.00	4,739.28	4,618.40	4,739.26	110.36	92.37	87.582	-21.19	10,084.59	493.17	351.28	141.89	3.476	
14,050.00	4,740.26	4,619.37	4,740.23	110.91	92.39	87.849	-21.19	10,084.59	448.33	301.96	146.37	3.063	
14,100.00	4,741.24	4,620.34	4,741.20	111.47	92.41	88.116	-21.19	10,084.59	404.70	252.93	151.77	2.666	
14,150.00	4,742.22	4,621.31	4,742.17	112.03	92.43	88.383	-21.19	10,084.59	362.72	204.43	158.29	2.292	
14,200.00	4,743.20	4,622.28	4,743.14	112.59	92.45	88.650	-21.19	10,084.59	323.02	156.92	166.11	1.945	
14,250.00	4,744.18	4,623.25	4,744.11	113.14	92.47	88.917	-21.19	10,084.59	286.57	111.25	175.32	1.635	
14,300.00	4,745.16	4,624.22	4,745.08	113.70	92.50	89.184	-21.19	10,084.59	254.75	69.10	185.66	1.372 Level 3	
14,350.00	4,746.14	4,625.19	4,746.05	114.26	92.52	89.451	-21.19	10,084.59	229.51	33.42	196.09	1.170 Level 3	
14,400.00	4,747.11	4,626.16	4,747.02	114.82	92.54	89.718	-21.19	10,084.59	213.18	8.74	204.44	1.043 Level 3	
14,447.29	4,748.04	4,627.08	4,747.93	115.34	92.56	89.971	-21.19	10,084.59	207.87	-0.03	207.90	1.000 Level 3, CC	
14,450.00	4,748.09	4,627.13	4,747.99	115.37	92.56	89.985	-21.19	10,084.59	207.89	-0.04	207.93	1.000 Level 3, ES, SF	
14,500.00	4,749.07	4,628.10	4,748.96	115.93	92.58	90.252	-21.19	10,084.59	214.44	9.21	205.23	1.045 Level 3	
14,550.00	4,750.05	4,629.07	4,749.93	116.49	92.60	90.519	-21.19	10,084.59	231.85	34.10	197.74	1.172 Level 3	
14,600.00	4,751.03	4,630.04	4,750.89	117.05	92.62	90.786	-21.19	10,084.59	257.91	69.75	188.16	1.371 Level 3	
14,650.00	4,752.01	4,631.01	4,751.86	117.60	92.64	91.054	-21.19	10,084.59	290.31	111.74	178.57	1.626	
14,700.00	4,752.99	4,631.98	4,752.83	118.16	92.66	91.321	-21.19	10,084.59	327.17	157.19	169.98	1.925	
14,750.00	4,753.97	4,632.94	4,753.80	118.72	92.68	91.587	-21.19	10,084.59	367.15	204.51	162.64	2.257	
14,800.00	4,754.95	4,633.91	4,754.77	119.28	92.70	91.854	-21.19	10,084.59	409.34	252.83	156.50	2.616	
14,850.00	4,755.93	4,634.88	4,755.74	119.84	92.72	92.121	-21.19	10,084.59	453.12	301.72	151.40	2.993	
14,900.00	4,756.90	4,635.85	4,756.71	120.39	92.74	92.388	-21.20	10,084.59	498.06	350.93	147.14	3.385	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: MUSKEGON 17 STATE COM 1 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.00 usft

Survey Program: 223-INC-ONLY

Offset Well Error: 0.00 usft

Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between		Minimum Separation (usft)	Separation Factor	Warning
				Reference	Offset		+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)			
11,500.00	4,690.34	4,582.14	4,691.13	82.61	90.30	-84.884	276.52	7,609.20	481.23	366.22	115.01	4.184	
11,550.00	4,691.31	4,583.12	4,692.11	83.16	90.32	-85.476	276.51	7,609.20	432.32	315.95	116.37	3.715	
11,600.00	4,692.29	4,584.10	4,693.09	83.71	90.35	-86.068	276.51	7,609.20	383.69	265.55	118.14	3.248	
11,650.00	4,693.27	4,585.08	4,694.07	84.27	90.37	-86.662	276.50	7,609.20	335.45	214.94	120.52	2.783	
11,700.00	4,694.25	4,586.06	4,695.05	84.82	90.39	-87.256	276.49	7,609.20	287.82	164.02	123.80	2.325	
11,750.00	4,695.23	4,587.05	4,696.04	85.37	90.42	-87.851	276.48	7,609.20	241.15	112.66	128.49	1.877	
11,800.00	4,696.21	4,588.03	4,697.02	85.93	90.44	-88.447	276.47	7,609.20	196.11	60.70	135.42	1.448	Level 3
11,850.00	4,697.19	4,589.01	4,698.00	86.48	90.46	-89.043	276.47	7,609.20	154.16	8.28	145.89	1.057	Level 3
11,900.00	4,698.17	4,589.99	4,698.98	87.03	90.49	-89.639	276.46	7,609.20	118.62	-42.36	160.98	0.737	Level 3
11,950.00	4,699.15	4,590.97	4,699.96	87.58	90.51	-90.235	276.45	7,609.20	96.82	-79.23	176.04	0.550	Level 3
11,972.00	4,699.58	4,591.41	4,700.40	87.83	90.52	-90.498	276.45	7,609.20	94.29	-84.04	178.33	0.529	Level 3, CC, ES, SF
12,000.00	4,700.13	4,591.96	4,700.95	88.14	90.53	-90.832	276.44	7,609.20	98.36	-76.62	174.98	0.562	Level 3
12,050.00	4,701.10	4,592.94	4,701.93	88.69	90.56	-91.428	276.43	7,609.20	122.36	-37.14	159.50	0.767	Level 3
12,100.00	4,702.08	4,593.92	4,702.91	89.25	90.58	-92.025	276.43	7,609.20	158.96	13.84	145.12	1.095	Level 3
12,150.00	4,703.06	4,594.90	4,703.89	89.80	90.60	-92.621	276.42	7,609.20	201.40	66.12	135.28	1.489	Level 3
12,200.00	4,704.04	4,595.88	4,704.87	90.35	90.63	-93.216	276.41	7,609.20	246.69	117.91	128.79	1.916	
12,250.00	4,705.02	4,596.87	4,705.85	90.91	90.65	-93.811	276.40	7,609.20	293.51	169.11	124.40	2.359	
12,300.00	4,706.00	4,597.85	4,706.84	91.46	90.67	-94.405	276.39	7,609.20	341.23	219.88	121.34	2.812	
12,350.00	4,706.98	4,598.83	4,707.82	92.02	90.70	-94.998	276.38	7,609.20	389.52	270.37	119.15	3.269	
12,400.00	4,707.96	4,599.81	4,708.80	92.57	90.72	-95.591	276.37	7,609.20	438.19	320.65	117.54	3.728	
12,450.00	4,708.94	4,600.79	4,709.78	93.12	90.74	-96.182	276.37	7,609.20	487.13	370.80	116.32	4.188	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: PHILLIPS 17 FEDERAL 1 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program:		Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Reference	Offset		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
13,650.00	4,732.43	4,614.95	4,732.55	106.46	97.67	-85.798			308.79	9,753.42	482.45	350.89	131.55	3.667	
13,700.00	4,733.41	4,615.94	4,733.54	107.02	97.69	-86.258			308.79	9,753.42	434.29	300.15	134.14	3.238	
13,750.00	4,734.39	4,616.93	4,734.53	107.57	97.72	-86.719			308.79	9,753.42	386.59	249.16	137.43	2.813	
13,800.00	4,735.37	4,617.92	4,735.52	108.13	97.74	-87.180			308.79	9,753.42	339.56	197.85	141.71	2.396	
13,850.00	4,736.35	4,618.92	4,736.51	108.69	97.77	-87.641			308.79	9,753.42	293.50	146.13	147.37	1.992	
13,900.00	4,737.33	4,619.91	4,737.50	109.24	97.79	-88.103			308.79	9,753.42	248.97	93.94	155.02	1.606	
13,950.00	4,738.30	4,620.90	4,738.49	109.80	97.82	-88.565			308.79	9,753.42	206.94	41.46	165.48	1.251 Level 3	
14,000.00	4,739.28	4,621.89	4,739.48	110.36	97.84	-89.027			308.78	9,753.42	169.30	-10.20	179.50	0.943 Level 3	
14,050.00	4,740.26	4,622.88	4,740.47	110.91	97.87	-89.490			308.78	9,753.42	139.64	-56.49	196.13	0.712 Level 3	
14,100.00	4,741.24	4,623.87	4,741.46	111.47	97.89	-89.952			308.78	9,753.42	123.83	-84.64	208.47	0.594 Level 3	
14,116.65	4,741.57	4,624.20	4,741.79	111.66	97.90	-90.106			308.78	9,753.42	122.70	-86.85	209.55	0.586 Level 3, CC, ES, SF	
14,150.00	4,742.22	4,624.86	4,742.46	112.03	97.91	-90.415			308.78	9,753.42	127.15	-78.83	205.98	0.617 Level 3	
14,200.00	4,743.20	4,625.85	4,743.45	112.59	97.94	-90.877			308.78	9,753.42	148.31	-43.11	191.42	0.775 Level 3	
14,250.00	4,744.18	4,626.84	4,744.44	113.14	97.96	-91.339			308.77	9,753.42	181.18	5.58	175.60	1.032 Level 3	
14,300.00	4,745.16	4,627.83	4,745.43	113.70	97.99	-91.801			308.77	9,753.42	220.57	57.57	163.00	1.353 Level 3	
14,350.00	4,746.14	4,628.82	4,746.42	114.26	98.01	-92.263			308.77	9,753.42	263.58	109.86	153.72	1.715	
14,400.00	4,747.11	4,629.81	4,747.41	114.82	98.04	-92.725			308.77	9,753.42	308.71	161.77	146.94	2.101	
14,450.00	4,748.09	4,630.80	4,748.40	115.37	98.06	-93.186			308.76	9,753.42	355.13	213.23	141.90	2.503	
14,500.00	4,749.07	4,631.79	4,749.39	115.93	98.09	-93.647			308.76	9,753.42	402.42	264.32	138.10	2.914	
14,550.00	4,750.05	4,632.78	4,750.38	116.49	98.11	-94.108			308.76	9,753.42	450.28	315.12	135.16	3.331	
14,600.00	4,751.03	4,633.78	4,751.37	117.05	98.13	-94.568			308.76	9,753.42	498.57	365.70	132.87	3.752	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

11/06/23 11:27:43AM

Page 14

COMPASS 5000.17 Build



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design: OZZY FEDERAL COM 1817DX - OFFSET: PHILLIPS 17 FEDERAL 2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 200-INC-ONLY												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance		Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
12,350.00	4,706.98	4,517.00	4,631.70	92.02	93.10	-55.820	307.38	8,434.02	469.80	346.18	123.62	3.800	
12,400.00	4,707.96	4,517.00	4,631.70	92.57	93.10	-55.820	307.38	8,434.02	422.70	297.01	125.70	3.363	
12,450.00	4,708.94	4,517.00	4,631.70	93.12	93.10	-55.820	307.38	8,434.02	376.35	248.07	128.29	2.934	
12,500.00	4,709.91	4,517.00	4,631.70	93.68	93.10	-55.820	307.38	8,434.02	331.07	199.51	131.56	2.517	
12,550.00	4,710.89	4,517.00	4,631.70	94.23	93.10	-55.820	307.38	8,434.02	287.35	151.66	135.69	2.118	
12,600.00	4,711.87	4,517.00	4,631.70	94.79	93.10	-55.820	307.38	8,434.02	246.03	105.15	140.88	1.746	
12,650.00	4,712.85	4,517.00	4,631.70	95.34	93.10	-55.820	307.38	8,434.02	208.55	61.39	147.16	1.417 Level 3	
12,700.00	4,713.83	4,517.00	4,631.70	95.90	93.10	-55.820	307.38	8,434.02	177.36	23.38	153.98	1.152 Level 3	
12,750.00	4,714.81	4,517.00	4,631.70	96.45	93.10	-55.820	307.38	8,434.02	156.27	-3.31	159.58	0.979 Level 3	
12,795.35	4,715.70	4,517.00	4,631.70	96.96	93.10	-55.820	307.38	8,434.02	149.54	-11.91	161.45	0.926 Level 3, CC, ES, SF	
12,800.00	4,715.79	4,517.00	4,631.70	97.01	93.10	-55.820	307.38	8,434.02	149.61	-11.81	161.42	0.927 Level 3	
12,850.00	4,716.77	4,517.00	4,631.70	97.56	93.10	-55.820	307.38	8,434.02	159.20	0.69	158.51	1.004 Level 3	
12,900.00	4,717.75	4,517.00	4,631.70	98.12	93.10	-55.820	307.38	8,434.02	182.51	29.97	152.54	1.196 Level 3	
12,950.00	4,718.73	4,517.00	4,631.70	98.67	93.10	-55.820	307.38	8,434.02	215.11	69.18	145.93	1.474 Level 3	
13,000.00	4,719.70	4,517.00	4,631.70	99.23	93.10	-55.820	307.38	8,434.02	253.45	113.40	140.05	1.810	
13,050.00	4,720.68	4,517.00	4,631.70	99.79	93.10	-55.820	307.38	8,434.02	295.29	160.03	135.26	2.183	
13,100.00	4,721.66	4,517.00	4,631.70	100.34	93.10	-55.820	307.38	8,434.02	339.35	207.89	131.47	2.581	
13,150.00	4,722.64	4,517.00	4,631.70	100.90	93.10	-55.820	307.38	8,434.02	384.87	256.39	128.48	2.996	
13,200.00	4,723.62	4,517.00	4,631.70	101.45	93.10	-55.820	307.38	8,434.02	431.38	305.26	126.12	3.420	
13,250.00	4,724.60	4,517.00	4,631.70	102.01	93.10	-55.820	307.38	8,434.02	478.59	354.36	124.24	3.852	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB = 20.3' @ 3723.30usft (TBD)

Coordinates are relative to: 001H

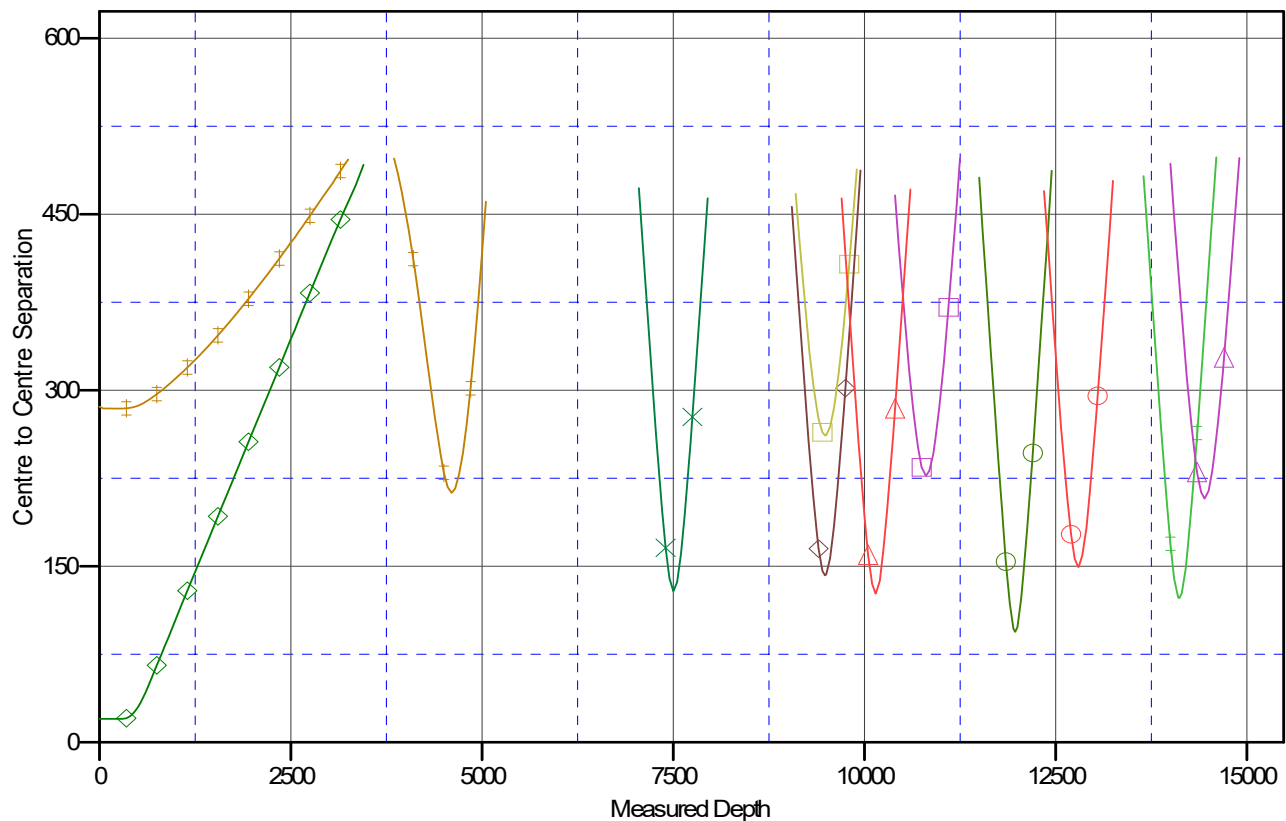
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.333334

Grid Convergence at Surface is: 0.114°

Ladder Plot



LEGEND

- OFFSET: PHILIPS 17 FEDERAL 1, Wellbore #1, Wellbore #1 V0 - OFFSET: GREN B FEDERAL 12, Wellbore #1, Wellbore #1 V0 - OFFSET: MUSGEGON 17 FEDERAL COM#002, Wellbore #1, INC-ONLY V0 - OFFSET: FOLK STATE 1, Wellbore #1, Wellbore #1 V0	- OFFSET: EMPRE 18 STATE #009, Wellbore #1, INC-ONLY V0 - OFFSET: MUSGEGON 17 STATE COM 1, Wellbore #1, Wellbore #1 V0 002H, OH, PLAN #1 V0 - OFFSET: EMPRE 18 STATE #006, Wellbore #1, INC-ONLY V0	- OFFSET: PHILIPS 17 FEDERAL 2, Wellbore #1, Wellbore #1 V0 - OFFSET: FOLK STATE 3, Wellbore #1, Wellbore #1 V0 - OFFSET: AID STATE #003, Wellbore #1, Wellbore #1 V0
---	--	---

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Longfellow Energy	Local Co-ordinate Reference:	Well 001H
Project:	Eddy Co., NM (Nad-83)	TVD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Reference Site:	OZZY FEDERAL COM 1817DX	MD Reference:	RKB = 20.3' @ 3723.30usft (TBD)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	001H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WBDS_SQL_3
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB = 20.3' @ 3723.30usft (TBD)

Offset Depths are relative to Offset Datum

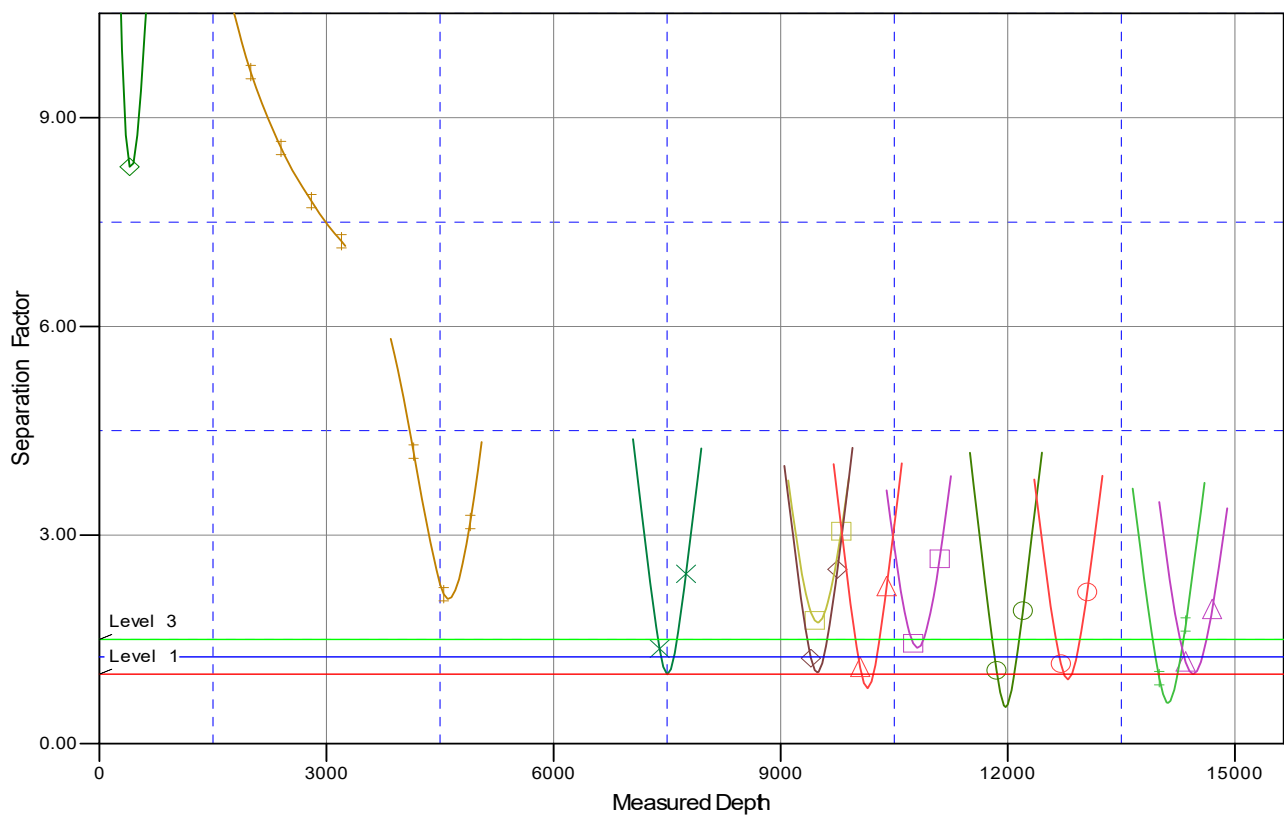
Central Meridian is -104.333334

Coordinates are relative to: 001H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.114°

Separation Factor Plot



LEGEND

- OFFSET: PHILLIPS 17 FEDERAL 1, Wellbore #1, Wellbore #1 V0 - OFFSET: GREN B FEDERAL 12, Wellbore #1, Wellbore #1 V0 - OFFSET: MUSKOGON 17 FEDERAL COM#002, Wellbore #1, INC-ONLY V0 - OFFSET: FOLK STATE 1, Wellbore #1, Wellbore #1 V0	- OFFSET: EMPRE 18 STATE #009, Wellbore #1, INC-ONLY V0 - OFFSET: MUSKOGON 17 STATE COM 1, Wellbore #1, Wellbore #1 V0 002H, OH, PLAN #1 V0 - OFFSET: EMPRE 18 STATE #006, Wellbore #1, INC-ONLY V0	- OFFSET: PHILLIPS 17 FEDERAL 2, Wellbore #1, Wellbore #1 V0 - OFFSET: FOLK STATE 3, Wellbore #1, Wellbore #1 V0 - OFFSET: AID STATE #003, Wellbore #1, Wellbore #1 V0
--	--	--

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Operator: Longfellow Energy

Well Name: Ozzy Federal Com 1817DX 001H

String Section:	Details:	Depth MD	Depth TVD	Casing length ft	Wt	Grade	MIY	Col	Pipe Str	Jt Str	Drill Fluid	Buoyancy Factor
Surface Casing	13 3/8", 54.5#, J-55, LT&C	360	360	360	54.5	J-55	2740	1130	853000	909000	9	0.863
Intermediate Casing	9-5/8", 36#, J-55, LT&C	1300	1295	1295	36	J-55	3950	2570	630000	714000	9.2	0.860
Production 1 Casing	7", 32#, L-80, BT&C	4930	4538	4930	32	L-80	9050	8600	745000	791000	9.2	0.860
Production 2 Casing	5-1/2", 20#, L-80 BT&C	15100	4759	15090	20	L-80	9190	8830	466000	503000	9.2	0.860

Collapse Design (Safety) Factors - BLM Criteria

Collapse Design (Safety) Factor: SFc

SFc = Pc / (MW x .052 x Ls)

Where

- * Pc is the rated pipe collapse pressure in pounds per square inch (psi)
- * MW is the mud weight in pounds per gallon (ppg)
- * Ls is the TVD depth of the string in feet (ft)

The Minimum Acceptable Collapse Design (Safety) Factor SFc = 1.125

Surface Casing	SFc =	1130	/	168	=	6.71
Intermediate Casing	SFc =	2570	/	620	=	4.15
Production 1 Casing	SFc =	8600	/	2171	=	3.96
Production 2 Casing	SFc =	8830	/	2277	=	3.88

Pipe Strength Design (Safety) Factors - BLM Criteria

Pipe Strength Design (Safety) Factor: SFtp

SFtp = Fp / Wt

Where

- * Fp is the rated pipe Body Strength in pounds (lbs)
- * Wt is the weight of the casing string in pounds (lbs)

The Minimum Acceptable Pipe Strength Design (Safety) Factor SFtp = 1.6 dry or 1.8 buoyant

Surface Casing	Sfi Dry =	853000	/	19620	=	43.48
	Sfi Buoyant =	853000	/	16924	=	50.40
Intermediate Casing	Sfi Dry =	630000	/	46800	=	13.46
	Sfi Buoyant =	630000	/	40227	=	15.66
Production 1 Casing	Sfi Dry =	745000	/	157760	=	4.72
	Sfi Buoyant =	745000	/	135601	=	5.49
Production 2 Casing *	Sfi Dry =	466000	/	302000	=	1.54
	Sfi Buoyant =	466000	/	259582	=	1.80

* Production 2 Casing design for vertical load while running in the hole prior to horizontal section

Burst Design (Safety) Factors - BLM Criteria

Burst Design (Safety) Factor: SFb

SFb = Pi / BHP

Where

- * Pi is the rated pipe burst (Minimum Internal Yield) pressure in pounds per square inch (psi)
- * BHP is bottom hole pressure in pounds per square inch (psi)

The Minimum Acceptable Burst Design (Safety) Factor SFb = 1.0

Surface Casing	SFb =	2740	/	168	=	16.26
Intermediate Casing	SFb =	3950	/	620	=	6.38
Production 1 Casing	SFb =	9050	/	2171	=	4.17
Production 2 Casing	SFb =	9190	/	2277	=	4.04

Joint Strength Design (Safety) Factors - BLM Criteria

Joint Strength Design (Safety) Factor: SFtj

SFtj = Fj / Wt

Where

- * Fj is the rated pipe Joint Strength in pounds (lbs)
- * Wt is the weight of the casing string in pounds (lbs)

The Minimum Acceptable Joint Strength Design (Safety) Factor SFtj = 1.6 dry or 1.8 buoyant

Surface Casing	Sfi Dry =	909000	/	19620	=	46.33
	Sfi Buoyant =	909000	/	16924	=	53.71
Intermediate Casing	Sfi Dry =	714000	/	46800	=	15.26
	Sfi Buoyant =	714000	/	40227	=	17.75
Production 1 Casing	Sfi Dry =	791000	/	145216	=	5.45
	Sfi Buoyant =	791000	/	124819	=	6.34
Production 2 Casing *	Sfi Dry =	503000	/	302000	=	1.67
	Sfi Buoyant =	503000	/	259582	=	1.94

* Production 2 Casing design for vertical load while running in the hole prior to horizontal section

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 386711

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 386711
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	11/1/2024
ward.rikala	All original COA's still apply.	11/1/2024