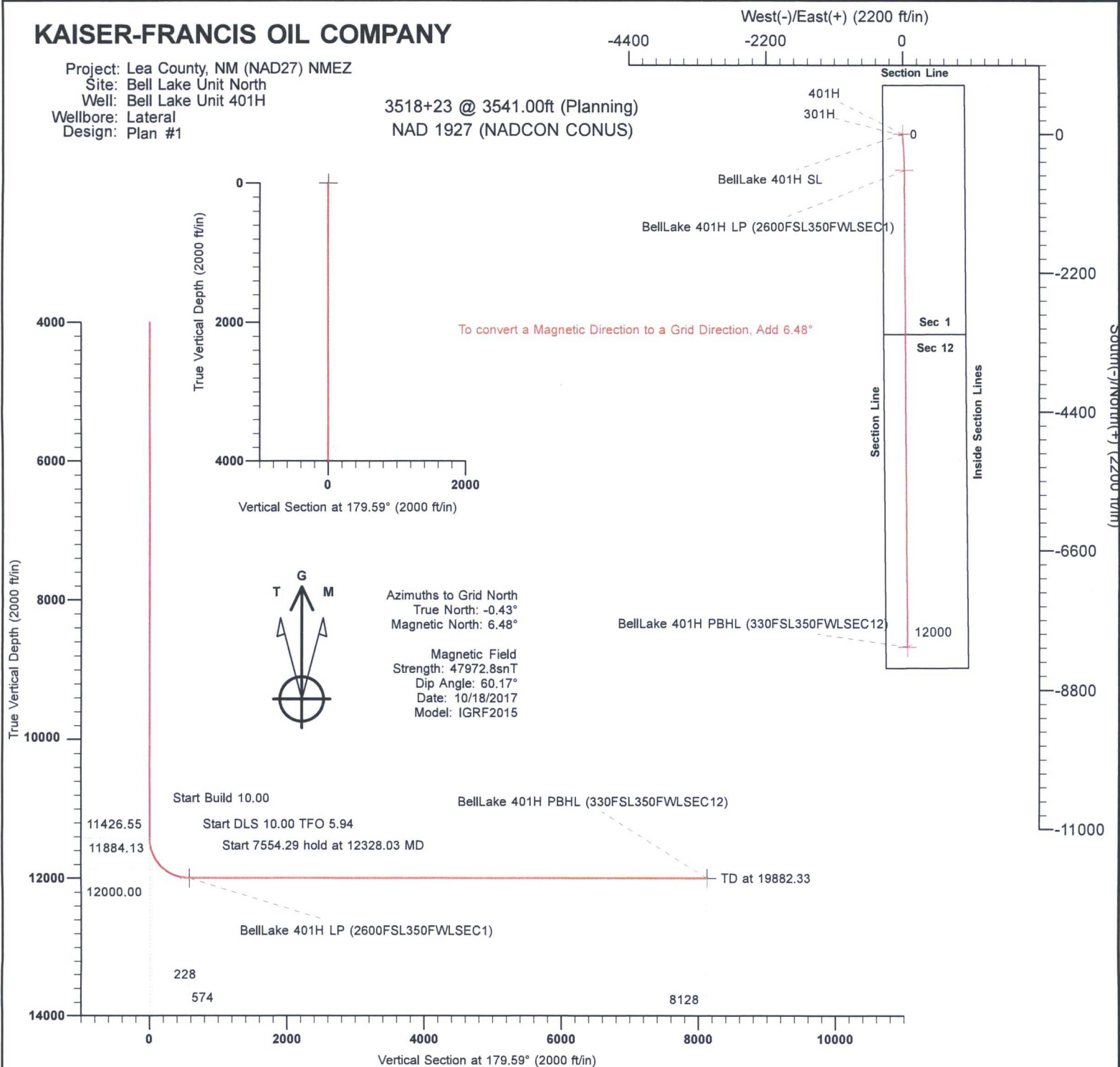


KAISER-FRANCIS OIL COMPANY

Project: Lea County, NM (NAD27) NMEZ
 Site: Bell Lake Unit North
 Well: Bell Lake Unit 401H
 Wellbore: Lateral
 Design: Plan #1

3518+23 @ 3541.00ft (Planning)
 NAD 1927 (NADCON CONUS)



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
BellLake 401H SL	0.00	0.00	0.00	486526.80	747171.80	Point
BellLake 401H LP (2600FSL350FWLSEC1)	12000.00	-577.21	28.47	485949.59	747200.27	Point
BellLake 401H PBHL (330FSL350FWLSEC12)	12000.00	-8127.60	83.10	478399.20	747254.90	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
11426.55	0.00	0.00	11426.55	0.00	0.00	0.00	0.00	0.00	
11956.55	53.00	176.00	11884.13	-227.59	15.91	10.00	176.00	227.70	
12328.03	90.00	179.58	12000.00	-573.51	28.04	10.00	5.94	573.69	
19882.33	90.00	179.58	12000.00	-8127.60	83.10	0.00	0.00	8127.99	BellLake 401H PBHL (330FSL350FWLSEC12)

Planning Report

Database:	VON_EDM	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Company:	KAISER-FRANCIS OIL COMPANY	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Project:	Lea County, NM (NAD27) NMEZ	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site:	Bell Lake Unit	North Reference:	Grid
Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Project	Lea County, NM (NAD27) NMEZ		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Bell Lake Unit, Centered on 401H				
Site Position:		Northing:	486,526.80 ft	Latitude:	32° 20' 6.134 N
From:	Map	Easting:	747,171.80 ft	Longitude:	103° 31' 59.102 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	0.43 °

Well	Bell Lake Unit 401H - Slot 401H					
Well Position	+N/-S	0.00 ft	Northing:	486,526.80 ft	Latitude:	32° 20' 6.134 N
	+E/-W	0.00 ft	Easting:	747,171.80 ft	Longitude:	103° 31' 59.102 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	3,518.00 ft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/18/17	6.91	60.17	47,973

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	179.59

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,426.55	0.00	0.00	11,426.55	0.00	0.00	0.00	0.00	0.00	0.00	
11,956.55	53.00	176.00	11,884.13	-227.59	15.91	10.00	10.00	0.00	176.00	
12,328.03	90.00	179.58	12,000.00	-573.51	28.04	10.00	9.96	0.96	5.94	
19,882.33	90.00	179.58	12,000.00	-8,127.60	83.10	0.00	0.00	0.00	0.00	BellLake 401H PBHL

Planning Report

Database:	VON_EDM	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Company:	KAISER-FRANCIS OIL COMPANY	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Project:	Lea County, NM (NAD27) NMEZ	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site:	Bell Lake Unit	North Reference:	Grid
Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BellLake 401H SL									
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	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00

Planning Report

Database:	VON_EDM	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Company:	KAISER-FRANCIS OIL COMPANY	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Project:	Lea County, NM (NAD27) NMEZ	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site:	Bell Lake Unit	North Reference:	Grid
Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,200.00	0.00	0.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.00	0.00	0.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00
10,400.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00	0.00
10,500.00	0.00	0.00	10,500.00	0.00	0.00	0.00	0.00	0.00	0.00
10,600.00	0.00	0.00	10,600.00	0.00	0.00	0.00	0.00	0.00	0.00

Planning Report

Database:	VON_EDM	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Company:	KAISER-FRANCIS OIL COMPANY	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Project:	Lea County, NM (NAD27) NMEZ	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site:	Bell Lake Unit	North Reference:	Grid
Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,700.00	0.00	0.00	10,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
10,800.00	0.00	0.00	10,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
10,900.00	0.00	0.00	10,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,000.00	0.00	0.00	11,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,100.00	0.00	0.00	11,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,200.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,300.00	0.00	0.00	11,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,400.00	0.00	0.00	11,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,426.55	0.00	0.00	11,426.55	0.00	0.00	0.00	0.00	0.00	0.00	
11,450.00	2.35	176.00	11,449.99	-0.48	0.03	0.48	10.00	10.00	0.00	
11,500.00	7.35	176.00	11,499.80	-4.69	0.33	4.69	10.00	10.00	0.00	
11,550.00	12.35	176.00	11,549.05	-13.22	0.92	13.22	10.00	10.00	0.00	
11,600.00	17.35	176.00	11,597.36	-25.99	1.82	26.00	10.00	10.00	0.00	
11,650.00	22.35	176.00	11,644.38	-42.92	3.00	42.94	10.00	10.00	0.00	
11,700.00	27.35	176.00	11,689.74	-63.87	4.47	63.90	10.00	10.00	0.00	
11,750.00	32.35	176.00	11,733.09	-88.68	6.20	88.72	10.00	10.00	0.00	
11,800.00	37.35	176.00	11,774.11	-117.17	8.19	117.23	10.00	10.00	0.00	
11,850.00	42.35	176.00	11,812.49	-149.12	10.43	149.19	10.00	10.00	0.00	
11,900.00	47.35	176.00	11,847.93	-184.28	12.89	184.37	10.00	10.00	0.00	
11,950.00	52.35	176.00	11,880.16	-222.39	15.55	222.50	10.00	10.00	0.00	
11,956.55	53.00	176.00	11,884.13	-227.59	15.91	227.70	10.00	10.00	0.00	
12,000.00	57.32	176.53	11,908.95	-263.17	18.23	263.29	10.00	9.95	1.23	
12,050.00	62.30	177.09	11,934.09	-306.30	20.63	306.44	10.00	9.95	1.11	
12,100.00	67.28	177.59	11,955.38	-351.48	22.72	351.63	10.00	9.96	1.01	
12,150.00	72.26	178.06	11,972.66	-398.35	24.50	398.51	10.00	9.96	0.94	
12,200.00	77.24	178.51	11,985.81	-446.55	25.94	446.72	10.00	9.96	0.89	
12,250.00	82.22	178.93	11,994.72	-495.72	27.04	495.90	10.00	9.96	0.85	
12,300.00	87.21	179.35	11,999.32	-545.49	27.78	545.67	10.00	9.97	0.83	
12,328.03	90.00	179.58	12,000.00	-573.51	28.04	573.69	10.00	9.97	0.83	
12,331.74	90.00	179.58	12,000.00	-577.21	28.07	577.39	0.00	0.00	0.00	
BellLake 301H LP (2600FSL350FWLSEC1) - BellLake 401H LP (2600FSL350FWLSEC1)										
12,400.00	90.00	179.58	12,000.00	-645.47	28.57	645.66	0.00	0.00	0.00	
12,500.00	90.00	179.58	12,000.00	-745.47	29.30	745.66	0.00	0.00	0.00	
12,600.00	90.00	179.58	12,000.00	-845.47	30.03	845.66	0.00	0.00	0.00	
12,700.00	90.00	179.58	12,000.00	-945.46	30.75	945.66	0.00	0.00	0.00	
12,800.00	90.00	179.58	12,000.00	-1,045.46	31.48	1,045.66	0.00	0.00	0.00	
12,900.00	90.00	179.58	12,000.00	-1,145.46	32.21	1,145.66	0.00	0.00	0.00	
13,000.00	90.00	179.58	12,000.00	-1,245.46	32.94	1,245.66	0.00	0.00	0.00	
13,100.00	90.00	179.58	12,000.00	-1,345.45	33.67	1,345.66	0.00	0.00	0.00	
13,200.00	90.00	179.58	12,000.00	-1,445.45	34.40	1,445.66	0.00	0.00	0.00	
13,300.00	90.00	179.58	12,000.00	-1,545.45	35.13	1,545.66	0.00	0.00	0.00	
13,400.00	90.00	179.58	12,000.00	-1,645.44	35.86	1,645.66	0.00	0.00	0.00	
13,500.00	90.00	179.58	12,000.00	-1,745.44	36.59	1,745.66	0.00	0.00	0.00	
13,600.00	90.00	179.58	12,000.00	-1,845.44	37.31	1,845.66	0.00	0.00	0.00	
13,700.00	90.00	179.58	12,000.00	-1,945.44	38.04	1,945.66	0.00	0.00	0.00	
13,800.00	90.00	179.58	12,000.00	-2,045.43	38.77	2,045.66	0.00	0.00	0.00	
13,900.00	90.00	179.58	12,000.00	-2,145.43	39.50	2,145.66	0.00	0.00	0.00	
14,000.00	90.00	179.58	12,000.00	-2,245.43	40.23	2,245.66	0.00	0.00	0.00	
14,100.00	90.00	179.58	12,000.00	-2,345.43	40.96	2,345.66	0.00	0.00	0.00	
14,200.00	90.00	179.58	12,000.00	-2,445.42	41.69	2,445.66	0.00	0.00	0.00	
14,300.00	90.00	179.58	12,000.00	-2,545.42	42.42	2,545.66	0.00	0.00	0.00	
14,400.00	90.00	179.58	12,000.00	-2,645.42	43.14	2,645.66	0.00	0.00	0.00	
14,500.00	90.00	179.58	12,000.00	-2,745.42	43.87	2,745.66	0.00	0.00	0.00	
14,600.00	90.00	179.58	12,000.00	-2,845.41	44.60	2,845.66	0.00	0.00	0.00	

Planning Report

Database:	VON_EDM	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Company:	KAISER-FRANCIS OIL COMPANY	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Project:	Lea County, NM (NAD27) NMEZ	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site:	Bell Lake Unit	North Reference:	Grid
Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,700.00	90.00	179.58	12,000.00	-2,945.41	45.33	2,945.66	0.00	0.00	0.00
14,800.00	90.00	179.58	12,000.00	-3,045.41	46.06	3,045.66	0.00	0.00	0.00
14,900.00	90.00	179.58	12,000.00	-3,145.40	46.79	3,145.66	0.00	0.00	0.00
15,000.00	90.00	179.58	12,000.00	-3,245.40	47.52	3,245.66	0.00	0.00	0.00
15,100.00	90.00	179.58	12,000.00	-3,345.40	48.25	3,345.66	0.00	0.00	0.00
15,200.00	90.00	179.58	12,000.00	-3,445.40	48.97	3,445.66	0.00	0.00	0.00
15,300.00	90.00	179.58	12,000.00	-3,545.39	49.70	3,545.66	0.00	0.00	0.00
15,400.00	90.00	179.58	12,000.00	-3,645.39	50.43	3,645.66	0.00	0.00	0.00
15,500.00	90.00	179.58	12,000.00	-3,745.39	51.16	3,745.66	0.00	0.00	0.00
15,600.00	90.00	179.58	12,000.00	-3,845.39	51.89	3,845.66	0.00	0.00	0.00
15,700.00	90.00	179.58	12,000.00	-3,945.38	52.62	3,945.66	0.00	0.00	0.00
15,800.00	90.00	179.58	12,000.00	-4,045.38	53.35	4,045.66	0.00	0.00	0.00
15,900.00	90.00	179.58	12,000.00	-4,145.38	54.08	4,145.66	0.00	0.00	0.00
16,000.00	90.00	179.58	12,000.00	-4,245.38	54.81	4,245.66	0.00	0.00	0.00
16,100.00	90.00	179.58	12,000.00	-4,345.37	55.53	4,345.66	0.00	0.00	0.00
16,200.00	90.00	179.58	12,000.00	-4,445.37	56.26	4,445.66	0.00	0.00	0.00
16,300.00	90.00	179.58	12,000.00	-4,545.37	56.99	4,545.66	0.00	0.00	0.00
16,400.00	90.00	179.58	12,000.00	-4,645.36	57.72	4,645.66	0.00	0.00	0.00
16,500.00	90.00	179.58	12,000.00	-4,745.36	58.45	4,745.66	0.00	0.00	0.00
16,600.00	90.00	179.58	12,000.00	-4,845.36	59.18	4,845.66	0.00	0.00	0.00
16,700.00	90.00	179.58	12,000.00	-4,945.36	59.91	4,945.66	0.00	0.00	0.00
16,800.00	90.00	179.58	12,000.00	-5,045.35	60.64	5,045.66	0.00	0.00	0.00
16,900.00	90.00	179.58	12,000.00	-5,145.35	61.36	5,145.66	0.00	0.00	0.00
17,000.00	90.00	179.58	12,000.00	-5,245.35	62.09	5,245.66	0.00	0.00	0.00
17,100.00	90.00	179.58	12,000.00	-5,345.35	62.82	5,345.66	0.00	0.00	0.00
17,200.00	90.00	179.58	12,000.00	-5,445.34	63.55	5,445.66	0.00	0.00	0.00
17,300.00	90.00	179.58	12,000.00	-5,545.34	64.28	5,545.66	0.00	0.00	0.00
17,400.00	90.00	179.58	12,000.00	-5,645.34	65.01	5,645.66	0.00	0.00	0.00
17,500.00	90.00	179.58	12,000.00	-5,745.34	65.74	5,745.66	0.00	0.00	0.00
17,600.00	90.00	179.58	12,000.00	-5,845.33	66.47	5,845.66	0.00	0.00	0.00
17,700.00	90.00	179.58	12,000.00	-5,945.33	67.20	5,945.66	0.00	0.00	0.00
17,800.00	90.00	179.58	12,000.00	-6,045.33	67.92	6,045.66	0.00	0.00	0.00
17,900.00	90.00	179.58	12,000.00	-6,145.33	68.65	6,145.66	0.00	0.00	0.00
18,000.00	90.00	179.58	12,000.00	-6,245.32	69.38	6,245.66	0.00	0.00	0.00
18,100.00	90.00	179.58	12,000.00	-6,345.32	70.11	6,345.66	0.00	0.00	0.00
18,200.00	90.00	179.58	12,000.00	-6,445.32	70.84	6,445.66	0.00	0.00	0.00
18,300.00	90.00	179.58	12,000.00	-6,545.31	71.57	6,545.66	0.00	0.00	0.00
18,400.00	90.00	179.58	12,000.00	-6,645.31	72.30	6,645.66	0.00	0.00	0.00
18,500.00	90.00	179.58	12,000.00	-6,745.31	73.03	6,745.66	0.00	0.00	0.00
18,600.00	90.00	179.58	12,000.00	-6,845.31	73.75	6,845.66	0.00	0.00	0.00
18,700.00	90.00	179.58	12,000.00	-6,945.30	74.48	6,945.66	0.00	0.00	0.00
18,800.00	90.00	179.58	12,000.00	-7,045.30	75.21	7,045.66	0.00	0.00	0.00
18,900.00	90.00	179.58	12,000.00	-7,145.30	75.94	7,145.66	0.00	0.00	0.00
19,000.00	90.00	179.58	12,000.00	-7,245.30	76.67	7,245.66	0.00	0.00	0.00
19,100.00	90.00	179.58	12,000.00	-7,345.29	77.40	7,345.66	0.00	0.00	0.00
19,200.00	90.00	179.58	12,000.00	-7,445.29	78.13	7,445.66	0.00	0.00	0.00
19,300.00	90.00	179.58	12,000.00	-7,545.29	78.86	7,545.66	0.00	0.00	0.00
19,400.00	90.00	179.58	12,000.00	-7,645.29	79.58	7,645.66	0.00	0.00	0.00
19,500.00	90.00	179.58	12,000.00	-7,745.28	80.31	7,745.66	0.00	0.00	0.00
19,600.00	90.00	179.58	12,000.00	-7,845.28	81.04	7,845.66	0.00	0.00	0.00
19,700.00	90.00	179.58	12,000.00	-7,945.28	81.77	7,945.66	0.00	0.00	0.00
19,800.00	90.00	179.58	12,000.00	-8,045.27	82.50	8,045.66	0.00	0.00	0.00
19,882.33	90.00	179.58	12,000.00	-8,127.60	83.10	8,127.99	0.00	0.00	0.00

Planning Report

Database:	VON_EDM	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Company:	KAISER-FRANCIS OIL COMPANY	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Project:	Lea County, NM (NAD27) NMEZ	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site:	Bell Lake Unit	North Reference:	Grid
Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
BellLake 301H PBHL (330FSL350FWLSEC12) - BellLake 401H PBHL (330FSL350FWLSEC12)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
BellLake 401H SL	0.00	0.00	0.00	0.00	0.00	486,526.80	747,171.80	32° 20' 6.134 N	103° 31' 59.102 W
- plan hits target center									
- Point									
BellLake 401H PBHL (330FSL350FWLSEC12)	0.00	0.00	12,000.00	-8,127.60	83.10	478,399.20	747,254.90	32° 18' 45.704 N	103° 31' 58.841 W
- plan hits target center									
- Point									
BellLake 401H LP (2600)	0.00	0.00	12,000.00	-577.21	28.47	485,949.60	747,200.27	32° 20' 0.421 N	103° 31' 58.820 W
- plan misses target center by 0.40ft at 12331.74ft MD (12000.00 TVD, -577.21 N, 28.07 E)									
- Point									

Anticollision Report

Company:	KAISER-FRANCIS OIL COMPANY	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Project:	Lea County, NM (NAD27) NMEZ	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Reference Site:	Bell Lake Unit	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral	Database:	VON_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.00 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	10/18/17		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	19,881.78	Plan #1 (Lateral)	MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Bell Lake Unit						
Bell Lake Unit 301H - Lateral - Plan #1	11,100.00	11,100.00	19.90	-59.24	0.251	Level 1, CC, ES, SF

Offset Design		Bell Lake Unit - Bell Lake Unit 301H - Lateral - Plan #1										Offset Site Error:		0.00 ft	
Survey Program:		O-MWD										Offset Well Error:		0.00 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)				
0.00	0.00	0.00	0.00	0.00	0.00	179.71	-19.90	0.10	19.90						
100.00	100.00	100.00	100.00	0.14	0.14	179.71	-19.90	0.10	19.90	19.62	0.28	72.096			
200.00	200.00	200.00	200.00	0.50	0.50	179.71	-19.90	0.10	19.90	18.91	0.99	20.041			
300.00	300.00	300.00	300.00	0.85	0.85	179.71	-19.90	0.10	19.90	18.19	1.71	11.638			
400.00	400.00	400.00	400.00	1.21	1.21	179.71	-19.90	0.10	19.90	17.47	2.43	8.200			
500.00	500.00	500.00	500.00	1.57	1.57	179.71	-19.90	0.10	19.90	16.76	3.14	6.330			
600.00	600.00	600.00	600.00	1.93	1.93	179.71	-19.90	0.10	19.90	16.04	3.86	5.155			
700.00	700.00	700.00	700.00	2.29	2.29	179.71	-19.90	0.10	19.90	15.32	4.58	4.347			
800.00	800.00	800.00	800.00	2.65	2.65	179.71	-19.90	0.10	19.90	14.61	5.29	3.759			
900.00	900.00	900.00	900.00	3.01	3.01	179.71	-19.90	0.10	19.90	13.89	6.01	3.310			
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	179.71	-19.90	0.10	19.90	13.17	6.73	2.958			
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	179.71	-19.90	0.10	19.90	12.45	7.45	2.673			
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	179.71	-19.90	0.10	19.90	11.74	8.16	2.438			
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	179.71	-19.90	0.10	19.90	11.02	8.88	2.241			
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	179.71	-19.90	0.10	19.90	10.30	9.60	2.074			
1,500.00	1,500.00	1,500.00	1,500.00	5.16	5.16	179.71	-19.90	0.10	19.90	9.59	10.31	1.930			
1,600.00	1,600.00	1,600.00	1,600.00	5.52	5.52	179.71	-19.90	0.10	19.90	8.87	11.03	1.804			
1,700.00	1,700.00	1,700.00	1,700.00	5.87	5.87	179.71	-19.90	0.10	19.90	8.15	11.75	1.694			
1,800.00	1,800.00	1,800.00	1,800.00	6.23	6.23	179.71	-19.90	0.10	19.90	7.44	12.46	1.597			
1,900.00	1,900.00	1,900.00	1,900.00	6.59	6.59	179.71	-19.90	0.10	19.90	6.72	13.18	1.510			
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	179.71	-19.90	0.10	19.90	6.00	13.90	1.432	Level 3		
2,100.00	2,100.00	2,100.00	2,100.00	7.31	7.31	179.71	-19.90	0.10	19.90	5.29	14.61	1.362	Level 3		
2,200.00	2,200.00	2,200.00	2,200.00	7.67	7.67	179.71	-19.90	0.10	19.90	4.57	15.33	1.298	Level 3		
2,300.00	2,300.00	2,300.00	2,300.00	8.02	8.02	179.71	-19.90	0.10	19.90	3.85	16.05	1.240	Level 2		
2,400.00	2,400.00	2,400.00	2,400.00	8.38	8.38	179.71	-19.90	0.10	19.90	3.13	16.77	1.187	Level 2		
2,500.00	2,500.00	2,500.00	2,500.00	8.74	8.74	179.71	-19.90	0.10	19.90	2.42	17.48	1.138	Level 2		

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

Anticollision Report

Company:	KAISER-FRANCIS OIL COMPANY	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Project:	Lea County, NM (NAD27) NMEZ	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Reference Site:	Bell Lake Unit	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral	Database:	VON_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Bell Lake Unit - Bell Lake Unit 301H - Lateral - Plan #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,600.00	2,600.00	2,600.00	2,600.00	9.10	9.10	179.71	-19.90	0.10	19.90	1.70	18.20	1.093 Level 2		
2,700.00	2,700.00	2,700.00	2,700.00	9.46	9.46	179.71	-19.90	0.10	19.90	0.98	18.92	1.052 Level 2		
2,800.00	2,800.00	2,800.00	2,800.00	9.82	9.82	179.71	-19.90	0.10	19.90	0.27	19.63	1.014 Level 2		
2,900.00	2,900.00	2,900.00	2,900.00	10.18	10.18	179.71	-19.90	0.10	19.90	-0.45	20.35	0.978 Level 1		
3,000.00	3,000.00	3,000.00	3,000.00	10.53	10.53	179.71	-19.90	0.10	19.90	-1.17	21.07	0.945 Level 1		
3,100.00	3,100.00	3,100.00	3,100.00	10.89	10.89	179.71	-19.90	0.10	19.90	-1.88	21.78	0.914 Level 1		
3,200.00	3,200.00	3,200.00	3,200.00	11.25	11.25	179.71	-19.90	0.10	19.90	-2.60	22.50	0.884 Level 1		
3,300.00	3,300.00	3,300.00	3,300.00	11.61	11.61	179.71	-19.90	0.10	19.90	-3.32	23.22	0.857 Level 1		
3,400.00	3,400.00	3,400.00	3,400.00	11.97	11.97	179.71	-19.90	0.10	19.90	-4.03	23.94	0.831 Level 1		
3,500.00	3,500.00	3,500.00	3,500.00	12.33	12.33	179.71	-19.90	0.10	19.90	-4.75	24.65	0.807 Level 1		
3,600.00	3,600.00	3,600.00	3,600.00	12.68	12.68	179.71	-19.90	0.10	19.90	-5.47	25.37	0.784 Level 1		
3,700.00	3,700.00	3,700.00	3,700.00	13.04	13.04	179.71	-19.90	0.10	19.90	-6.19	26.09	0.763 Level 1		
3,800.00	3,800.00	3,800.00	3,800.00	13.40	13.40	179.71	-19.90	0.10	19.90	-6.90	26.80	0.742 Level 1		
3,900.00	3,900.00	3,900.00	3,900.00	13.76	13.76	179.71	-19.90	0.10	19.90	-7.62	27.52	0.723 Level 1		
4,000.00	4,000.00	4,000.00	4,000.00	14.12	14.12	179.71	-19.90	0.10	19.90	-8.34	28.24	0.705 Level 1		
4,100.00	4,100.00	4,100.00	4,100.00	14.48	14.48	179.71	-19.90	0.10	19.90	-9.05	28.95	0.687 Level 1		
4,200.00	4,200.00	4,200.00	4,200.00	14.84	14.84	179.71	-19.90	0.10	19.90	-9.77	29.67	0.671 Level 1		
4,300.00	4,300.00	4,300.00	4,300.00	15.19	15.19	179.71	-19.90	0.10	19.90	-10.49	30.39	0.655 Level 1		
4,400.00	4,400.00	4,400.00	4,400.00	15.55	15.55	179.71	-19.90	0.10	19.90	-11.20	31.10	0.640 Level 1		
4,500.00	4,500.00	4,500.00	4,500.00	15.91	15.91	179.71	-19.90	0.10	19.90	-11.92	31.82	0.625 Level 1		
4,600.00	4,600.00	4,600.00	4,600.00	16.27	16.27	179.71	-19.90	0.10	19.90	-12.64	32.54	0.612 Level 1		
4,700.00	4,700.00	4,700.00	4,700.00	16.63	16.63	179.71	-19.90	0.10	19.90	-13.36	33.26	0.598 Level 1		
4,800.00	4,800.00	4,800.00	4,800.00	16.99	16.99	179.71	-19.90	0.10	19.90	-14.07	33.97	0.586 Level 1		
4,900.00	4,900.00	4,900.00	4,900.00	17.34	17.34	179.71	-19.90	0.10	19.90	-14.79	34.69	0.574 Level 1		
5,000.00	5,000.00	5,000.00	5,000.00	17.70	17.70	179.71	-19.90	0.10	19.90	-15.51	35.41	0.562 Level 1		
5,100.00	5,100.00	5,100.00	5,100.00	18.06	18.06	179.71	-19.90	0.10	19.90	-16.22	36.12	0.551 Level 1		
5,200.00	5,200.00	5,200.00	5,200.00	18.42	18.42	179.71	-19.90	0.10	19.90	-16.94	36.84	0.540 Level 1		
5,300.00	5,300.00	5,300.00	5,300.00	18.78	18.78	179.71	-19.90	0.10	19.90	-17.66	37.56	0.530 Level 1		
5,400.00	5,400.00	5,400.00	5,400.00	19.14	19.14	179.71	-19.90	0.10	19.90	-18.37	38.27	0.520 Level 1		
5,500.00	5,500.00	5,500.00	5,500.00	19.50	19.50	179.71	-19.90	0.10	19.90	-19.09	38.99	0.510 Level 1		
5,600.00	5,600.00	5,600.00	5,600.00	19.85	19.85	179.71	-19.90	0.10	19.90	-19.81	39.71	0.501 Level 1		
5,700.00	5,700.00	5,700.00	5,700.00	20.21	20.21	179.71	-19.90	0.10	19.90	-20.52	40.42	0.492 Level 1		
5,800.00	5,800.00	5,800.00	5,800.00	20.57	20.57	179.71	-19.90	0.10	19.90	-21.24	41.14	0.484 Level 1		
5,900.00	5,900.00	5,900.00	5,900.00	20.93	20.93	179.71	-19.90	0.10	19.90	-21.96	41.86	0.475 Level 1		
6,000.00	6,000.00	6,000.00	6,000.00	21.29	21.29	179.71	-19.90	0.10	19.90	-22.68	42.58	0.467 Level 1		
6,100.00	6,100.00	6,100.00	6,100.00	21.65	21.65	179.71	-19.90	0.10	19.90	-23.39	43.29	0.460 Level 1		
6,200.00	6,200.00	6,200.00	6,200.00	22.00	22.00	179.71	-19.90	0.10	19.90	-24.11	44.01	0.452 Level 1		
6,300.00	6,300.00	6,300.00	6,300.00	22.36	22.36	179.71	-19.90	0.10	19.90	-24.83	44.73	0.445 Level 1		
6,400.00	6,400.00	6,400.00	6,400.00	22.72	22.72	179.71	-19.90	0.10	19.90	-25.54	45.44	0.438 Level 1		
6,500.00	6,500.00	6,500.00	6,500.00	23.08	23.08	179.71	-19.90	0.10	19.90	-26.26	46.16	0.431 Level 1		
6,600.00	6,600.00	6,600.00	6,600.00	23.44	23.44	179.71	-19.90	0.10	19.90	-26.98	46.88	0.425 Level 1		
6,700.00	6,700.00	6,700.00	6,700.00	23.80	23.80	179.71	-19.90	0.10	19.90	-27.69	47.59	0.418 Level 1		
6,800.00	6,800.00	6,800.00	6,800.00	24.16	24.16	179.71	-19.90	0.10	19.90	-28.41	48.31	0.412 Level 1		
6,900.00	6,900.00	6,900.00	6,900.00	24.51	24.51	179.71	-19.90	0.10	19.90	-29.13	49.03	0.406 Level 1		
7,000.00	7,000.00	7,000.00	7,000.00	24.87	24.87	179.71	-19.90	0.10	19.90	-29.84	49.75	0.400 Level 1		
7,100.00	7,100.00	7,100.00	7,100.00	25.23	25.23	179.71	-19.90	0.10	19.90	-30.56	50.46	0.394 Level 1		
7,200.00	7,200.00	7,200.00	7,200.00	25.59	25.59	179.71	-19.90	0.10	19.90	-31.28	51.18	0.389 Level 1		
7,300.00	7,300.00	7,300.00	7,300.00	25.95	25.95	179.71	-19.90	0.10	19.90	-32.00	51.90	0.383 Level 1		
7,400.00	7,400.00	7,400.00	7,400.00	26.31	26.31	179.71	-19.90	0.10	19.90	-32.71	52.61	0.378 Level 1		
7,500.00	7,500.00	7,500.00	7,500.00	26.66	26.66	179.71	-19.90	0.10	19.90	-33.43	53.33	0.373 Level 1		
7,600.00	7,600.00	7,600.00	7,600.00	27.02	27.02	179.71	-19.90	0.10	19.90	-34.15	54.05	0.368 Level 1		
7,700.00	7,700.00	7,700.00	7,700.00	27.38	27.38	179.71	-19.90	0.10	19.90	-34.86	54.76	0.363 Level 1		

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

Anticollision Report

Company:	KAISER-FRANCIS OIL COMPANY	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Project:	Lea County, NM (NAD27) NMEZ	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Reference Site:	Bell Lake Unit	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral	Database:	VON_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Bell Lake Unit - Bell Lake Unit 301H - Lateral - Plan #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,800.00	7,800.00	7,800.00	7,800.00	27.74	27.74	179.71	-19.90	0.10	19.90	-35.58	55.48	0.359	Level 1	
7,900.00	7,900.00	7,900.00	7,900.00	28.10	28.10	179.71	-19.90	0.10	19.90	-36.30	56.20	0.354	Level 1	
8,000.00	8,000.00	8,000.00	8,000.00	28.46	28.46	179.71	-19.90	0.10	19.90	-37.01	56.91	0.350	Level 1	
8,100.00	8,100.00	8,100.00	8,100.00	28.82	28.82	179.71	-19.90	0.10	19.90	-37.73	57.63	0.345	Level 1	
8,200.00	8,200.00	8,200.00	8,200.00	29.17	29.17	179.71	-19.90	0.10	19.90	-38.45	58.35	0.341	Level 1	
8,300.00	8,300.00	8,300.00	8,300.00	29.53	29.53	179.71	-19.90	0.10	19.90	-39.17	59.07	0.337	Level 1	
8,400.00	8,400.00	8,400.00	8,400.00	29.89	29.89	179.71	-19.90	0.10	19.90	-39.88	59.78	0.333	Level 1	
8,500.00	8,500.00	8,500.00	8,500.00	30.25	30.25	179.71	-19.90	0.10	19.90	-40.60	60.50	0.329	Level 1	
8,600.00	8,600.00	8,600.00	8,600.00	30.61	30.61	179.71	-19.90	0.10	19.90	-41.32	61.22	0.325	Level 1	
8,700.00	8,700.00	8,700.00	8,700.00	30.97	30.97	179.71	-19.90	0.10	19.90	-42.03	61.93	0.321	Level 1	
8,800.00	8,800.00	8,800.00	8,800.00	31.33	31.33	179.71	-19.90	0.10	19.90	-42.75	62.65	0.318	Level 1	
8,900.00	8,900.00	8,900.00	8,900.00	31.68	31.68	179.71	-19.90	0.10	19.90	-43.47	63.37	0.314	Level 1	
9,000.00	9,000.00	9,000.00	9,000.00	32.04	32.04	179.71	-19.90	0.10	19.90	-44.18	64.08	0.311	Level 1	
9,100.00	9,100.00	9,100.00	9,100.00	32.40	32.40	179.71	-19.90	0.10	19.90	-44.90	64.80	0.307	Level 1	
9,200.00	9,200.00	9,200.00	9,200.00	32.76	32.76	179.71	-19.90	0.10	19.90	-45.62	65.52	0.304	Level 1	
9,300.00	9,300.00	9,300.00	9,300.00	33.12	33.12	179.71	-19.90	0.10	19.90	-46.33	66.23	0.300	Level 1	
9,400.00	9,400.00	9,400.00	9,400.00	33.48	33.48	179.71	-19.90	0.10	19.90	-47.05	66.95	0.297	Level 1	
9,500.00	9,500.00	9,500.00	9,500.00	33.83	33.83	179.71	-19.90	0.10	19.90	-47.77	67.67	0.294	Level 1	
9,600.00	9,600.00	9,600.00	9,600.00	34.19	34.19	179.71	-19.90	0.10	19.90	-48.49	68.39	0.291	Level 1	
9,700.00	9,700.00	9,700.00	9,700.00	34.55	34.55	179.71	-19.90	0.10	19.90	-49.20	69.10	0.288	Level 1	
9,800.00	9,800.00	9,800.00	9,800.00	34.91	34.91	179.71	-19.90	0.10	19.90	-49.92	69.82	0.285	Level 1	
9,900.00	9,900.00	9,900.00	9,900.00	35.27	35.27	179.71	-19.90	0.10	19.90	-50.64	70.54	0.282	Level 1	
10,000.00	10,000.00	10,000.00	10,000.00	35.63	35.63	179.71	-19.90	0.10	19.90	-51.35	71.25	0.279	Level 1	
10,100.00	10,100.00	10,100.00	10,100.00	35.99	35.99	179.71	-19.90	0.10	19.90	-52.07	71.97	0.277	Level 1	
10,200.00	10,200.00	10,200.00	10,200.00	36.34	36.34	179.71	-19.90	0.10	19.90	-52.79	72.69	0.274	Level 1	
10,300.00	10,300.00	10,300.00	10,300.00	36.70	36.70	179.71	-19.90	0.10	19.90	-53.50	73.40	0.271	Level 1	
10,400.00	10,400.00	10,400.00	10,400.00	37.06	37.06	179.71	-19.90	0.10	19.90	-54.22	74.12	0.268	Level 1	
10,500.00	10,500.00	10,500.00	10,500.00	37.42	37.42	179.71	-19.90	0.10	19.90	-54.94	74.84	0.266	Level 1	
10,600.00	10,600.00	10,600.00	10,600.00	37.78	37.78	179.71	-19.90	0.10	19.90	-55.65	75.56	0.263	Level 1	
10,700.00	10,700.00	10,700.00	10,700.00	38.14	38.14	179.71	-19.90	0.10	19.90	-56.37	76.27	0.261	Level 1	
10,800.00	10,800.00	10,800.00	10,800.00	38.49	38.49	179.71	-19.90	0.10	19.90	-57.09	76.99	0.258	Level 1	
10,900.00	10,900.00	10,900.00	10,900.00	38.85	38.85	179.71	-19.90	0.10	19.90	-57.81	77.71	0.256	Level 1	
11,000.00	11,000.00	11,000.00	11,000.00	39.21	39.21	179.71	-19.90	0.10	19.90	-58.52	78.42	0.254	Level 1	
11,100.00	11,100.00	11,100.00	11,100.00	39.57	39.57	179.71	-19.90	0.10	19.90	-59.24	79.14	0.251	Level 1, CC, ES, SF	
11,200.00	11,200.00	11,197.18	11,197.00	39.93	39.90	179.03	-24.24	0.41	24.43	-54.99	79.42	0.308	Level 1	
11,300.00	11,300.00	11,289.64	11,287.44	40.29	40.18	177.67	-42.90	1.75	44.74	-33.60	78.33	0.571	Level 1	
11,400.00	11,400.00	11,374.17	11,366.53	40.65	40.44	176.94	-72.46	3.87	79.91	3.67	76.24	1.048	Level 2	
11,500.00	11,499.80	11,450.56	11,433.56	40.98	40.66	0.58	-108.88	6.48	123.62	50.10	73.53	1.681		
11,600.00	11,597.36	11,523.71	11,492.65	41.29	40.87	0.40	-151.80	9.56	163.87	93.55	70.32	2.330		
11,700.00	11,689.74	11,594.58	11,544.23	41.59	41.07	0.30	-200.22	13.03	199.59	132.78	66.81	2.987		
11,800.00	11,774.11	11,663.74	11,588.42	41.88	41.27	0.24	-253.24	16.80	230.37	167.20	63.18	3.647		
11,900.00	11,847.93	11,731.69	11,625.31	42.16	41.48	0.33	-310.15	20.25	255.85	196.23	59.62	4.291		
12,000.00	11,908.95	11,800.00	11,655.37	42.45	41.69	0.34	-371.38	23.16	275.75	219.26	56.49	4.882		
12,100.00	11,955.38	11,864.98	11,677.03	42.75	41.90	0.15	-432.56	25.39	289.93	236.33	53.60	5.409		
12,200.00	11,985.81	11,930.86	11,691.81	43.07	42.11	0.03	-496.71	27.07	298.25	246.63	51.62	5.777		
12,300.00	11,999.32	12,000.00	11,699.32	43.40	42.35	-0.03	-565.38	28.19	300.66	249.95	50.72	5.928		
12,400.00	12,000.00	12,080.10	11,700.00	43.75	42.63	-0.05	-645.47	28.82	300.01	249.31	50.70	5.917		
12,500.00	12,000.00	12,180.10	11,700.00	44.16	43.04	-0.05	-745.47	29.55	300.01	249.03	50.97	5.886		
12,600.00	12,000.00	12,280.10	11,700.00	44.62	43.51	-0.05	-845.46	30.27	300.01	248.71	51.29	5.849		
12,700.00	12,000.00	12,380.10	11,700.00	45.14	44.03	-0.05	-945.46	31.00	300.01	248.35	51.66	5.807		
12,800.00	12,000.00	12,480.10	11,700.00	45.72	44.61	-0.05	-1,045.46	31.72	300.01	247.94	52.07	5.762		
12,900.00	12,000.00	12,580.10	11,700.00	46.35	45.24	-0.05	-1,145.46	32.45	300.00	247.48	52.52	5.712		

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

Anticollision Report

Company:	KAISER-FRANCIS OIL COMPANY	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Project:	Lea County, NM (NAD27) NMEZ	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Reference Site:	Bell Lake Unit	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral	Database:	VON_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

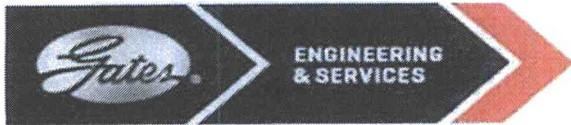
Offset Design Bell Lake Unit - Bell Lake Unit 301H - Lateral - Plan #1													Offset Site Error:	0.00 ft
Survey Program: O-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
13,000.00	12,000.00	12,680.10	11,700.00	47.02	45.92	-0.04	-1,245.45	33.17	300.00	246.99	53.02	5.658		
13,100.00	12,000.00	12,780.10	11,700.00	47.75	46.65	-0.04	-1,345.45	33.90	300.00	246.45	53.56	5.602		
13,200.00	12,000.00	12,880.10	11,700.00	48.52	47.43	-0.04	-1,445.45	34.63	300.00	245.87	54.13	5.542		
13,300.00	12,000.00	12,980.10	11,700.00	49.33	48.25	-0.04	-1,545.45	35.35	300.00	245.25	54.75	5.479		
13,400.00	12,000.00	13,080.10	11,700.00	50.19	49.12	-0.04	-1,645.44	36.08	300.00	244.60	55.41	5.415		
13,500.00	12,000.00	13,180.10	11,700.00	51.08	50.02	-0.04	-1,745.44	36.80	300.00	243.91	56.10	5.348		
13,600.00	12,000.00	13,280.10	11,700.00	52.02	50.96	-0.04	-1,845.44	37.53	300.00	243.18	56.82	5.280		
13,700.00	12,000.00	13,380.10	11,700.00	52.98	51.94	-0.04	-1,945.44	38.25	300.00	242.42	57.58	5.210		
13,800.00	12,000.00	13,480.10	11,700.00	53.98	52.95	-0.04	-2,045.43	38.98	300.00	241.63	58.37	5.139		
13,900.00	12,000.00	13,580.10	11,700.00	55.02	53.99	-0.04	-2,145.43	39.70	300.00	240.81	59.20	5.068		
14,000.00	12,000.00	13,680.10	11,700.00	56.08	55.06	-0.04	-2,245.43	40.43	300.00	239.95	60.05	4.996		
14,100.00	12,000.00	13,780.10	11,700.00	57.17	56.16	-0.04	-2,345.42	41.15	300.00	239.07	60.93	4.924		
14,200.00	12,000.00	13,880.10	11,700.00	58.28	57.29	-0.04	-2,445.42	41.88	300.00	238.16	61.84	4.851		
14,300.00	12,000.00	13,980.10	11,700.00	59.43	58.44	-0.04	-2,545.42	42.61	300.00	237.23	62.77	4.779		
14,400.00	12,000.00	14,080.10	11,700.00	60.59	59.62	-0.04	-2,645.42	43.33	300.00	236.27	63.73	4.707		
14,500.00	12,000.00	14,180.10	11,700.00	61.78	60.82	-0.03	-2,745.41	44.06	300.00	235.29	64.72	4.636		
14,600.00	12,000.00	14,280.10	11,700.00	62.99	62.04	-0.03	-2,845.41	44.78	300.00	234.28	65.72	4.565		
14,700.00	12,000.00	14,380.10	11,700.00	64.22	63.28	-0.03	-2,945.41	45.51	300.00	233.25	66.75	4.494		
14,800.00	12,000.00	14,480.10	11,700.00	65.46	64.53	-0.03	-3,045.41	46.23	300.00	232.20	67.80	4.425		
14,900.00	12,000.00	14,580.10	11,700.00	66.73	65.81	-0.03	-3,145.40	46.96	300.00	231.13	68.87	4.356		
15,000.00	12,000.00	14,680.10	11,700.00	68.01	67.10	-0.03	-3,245.40	47.68	300.00	230.05	69.96	4.288		
15,100.00	12,000.00	14,780.10	11,700.00	69.31	68.41	-0.03	-3,345.40	48.41	300.00	228.94	71.06	4.222		
15,200.00	12,000.00	14,880.10	11,700.00	70.62	69.73	-0.03	-3,445.40	49.13	300.00	227.82	72.18	4.156		
15,300.00	12,000.00	14,980.10	11,700.00	71.95	71.07	-0.03	-3,545.39	49.86	300.00	226.68	73.32	4.092		
15,400.00	12,000.00	15,080.10	11,700.00	73.29	72.41	-0.03	-3,645.39	50.58	300.00	225.53	74.48	4.028		
15,500.00	12,000.00	15,180.10	11,700.00	74.64	73.78	-0.03	-3,745.39	51.31	300.00	224.36	75.65	3.966		
15,600.00	12,000.00	15,280.10	11,700.00	76.00	75.15	-0.03	-3,845.39	52.04	300.00	223.17	76.83	3.905		
15,700.00	12,000.00	15,380.10	11,700.00	77.38	76.53	-0.03	-3,945.38	52.76	300.00	221.97	78.03	3.845		
15,800.00	12,000.00	15,480.10	11,700.00	78.76	77.93	-0.03	-4,045.38	53.49	300.00	220.76	79.24	3.786		
15,900.00	12,000.00	15,580.10	11,700.00	80.16	79.33	-0.03	-4,145.38	54.21	300.00	219.54	80.46	3.729		
16,000.00	12,000.00	15,680.10	11,700.00	81.57	80.75	-0.03	-4,245.37	54.94	300.00	218.31	81.70	3.672		
16,100.00	12,000.00	15,780.10	11,700.00	82.98	82.17	-0.02	-4,345.37	55.66	300.00	217.06	82.94	3.617		
16,200.00	12,000.00	15,880.10	11,700.00	84.41	83.60	-0.02	-4,445.37	56.39	300.00	215.80	84.20	3.563		
16,300.00	12,000.00	15,980.10	11,700.00	85.84	85.04	-0.02	-4,545.37	57.11	300.00	214.54	85.47	3.510		
16,400.00	12,000.00	16,080.10	11,700.00	87.28	86.49	-0.02	-4,645.36	57.84	300.00	213.26	86.74	3.459		
16,500.00	12,000.00	16,180.10	11,700.00	88.73	87.94	-0.02	-4,745.36	58.56	300.00	211.97	88.03	3.408		
16,600.00	12,000.00	16,280.10	11,700.00	90.18	89.41	-0.02	-4,845.36	59.29	300.00	210.68	89.33	3.359		
16,700.00	12,000.00	16,380.10	11,700.00	91.64	90.87	-0.02	-4,945.36	60.02	300.00	209.37	90.63	3.310		
16,800.00	12,000.00	16,480.10	11,700.00	93.11	92.35	-0.02	-5,045.35	60.74	300.00	208.06	91.94	3.263		
16,900.00	12,000.00	16,580.10	11,700.00	94.58	93.83	-0.02	-5,145.35	61.47	300.00	206.74	93.26	3.217		
17,000.00	12,000.00	16,680.10	11,700.00	96.06	95.31	-0.02	-5,245.35	62.19	300.00	205.41	94.59	3.172		
17,100.00	12,000.00	16,780.10	11,700.00	97.55	96.81	-0.02	-5,345.35	62.92	300.00	204.08	95.93	3.127		
17,200.00	12,000.00	16,880.10	11,700.00	99.04	98.30	-0.02	-5,445.34	63.64	300.00	202.73	97.27	3.084		
17,300.00	12,000.00	16,980.10	11,700.00	100.54	99.80	-0.02	-5,545.34	64.37	300.00	201.38	98.62	3.042		
17,400.00	12,000.00	17,080.10	11,700.00	102.04	101.31	-0.02	-5,645.34	65.09	300.00	200.03	99.97	3.001		
17,500.00	12,000.00	17,180.10	11,700.00	103.54	102.82	-0.02	-5,745.34	65.82	300.00	198.67	101.33	2.961		
17,600.00	12,000.00	17,280.10	11,700.00	105.05	104.34	-0.01	-5,845.33	66.54	300.00	197.30	102.70	2.921		
17,700.00	12,000.00	17,380.10	11,700.00	106.57	105.86	-0.01	-5,945.33	67.27	300.00	195.93	104.08	2.883		
17,800.00	12,000.00	17,480.10	11,700.00	108.08	107.38	-0.01	-6,045.33	67.99	300.00	194.55	105.45	2.845		
17,900.00	12,000.00	17,580.10	11,700.00	109.61	108.91	-0.01	-6,145.32	68.72	300.00	193.16	106.84	2.808		
18,000.00	12,000.00	17,680.10	11,700.00	111.13	110.44	-0.01	-6,245.32	69.45	300.00	191.77	108.23	2.772		
18,100.00	12,000.00	17,780.10	11,700.00	112.66	111.97	-0.01	-6,345.32	70.17	300.00	190.38	109.62	2.737		

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

Anticollision Report

Company:	KAISER-FRANCIS OIL COMPANY	Local Co-ordinate Reference:	Well Bell Lake Unit 401H - Slot 401H
Project:	Lea County, NM (NAD27) NMEZ	TVD Reference:	3518+23 @ 3541.00ft (Planning)
Reference Site:	Bell Lake Unit	MD Reference:	3518+23 @ 3541.00ft (Planning)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Bell Lake Unit 401H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral	Database:	VON_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Bell Lake Unit - Bell Lake Unit 301H - Lateral - Plan #1													Offset Site Error:	0.00 ft
Survey Program: D-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
18,200.00	12,000.00	17,880.10	11,700.00	114.20	113.51	-0.01	-6,445.32	70.90	300.00	188.98	111.02	2.702		
18,300.00	12,000.00	17,980.10	11,700.00	115.73	115.05	-0.01	-6,545.31	71.62	300.00	187.58	112.42	2.668		
18,400.00	12,000.00	18,080.10	11,700.00	117.27	116.60	-0.01	-6,645.31	72.35	300.00	186.17	113.83	2.635		
18,500.00	12,000.00	18,180.10	11,700.00	118.81	118.14	-0.01	-6,745.31	73.07	300.00	184.76	115.24	2.603		
18,600.00	12,000.00	18,280.10	11,700.00	120.36	119.69	-0.01	-6,845.31	73.80	300.00	183.34	116.66	2.572		
18,700.00	12,000.00	18,380.10	11,700.00	121.91	121.25	-0.01	-6,945.30	74.52	300.00	181.92	118.08	2.541		
18,800.00	12,000.00	18,480.10	11,700.00	123.46	122.80	-0.01	-7,045.30	75.25	300.00	180.50	119.50	2.510		
18,900.00	12,000.00	18,580.10	11,700.00	125.01	124.36	-0.01	-7,145.30	75.97	300.00	179.07	120.93	2.481		
19,000.00	12,000.00	18,680.10	11,700.00	126.57	125.92	-0.01	-7,245.30	76.70	300.00	177.64	122.36	2.452		
19,100.00	12,000.00	18,780.10	11,700.00	128.13	127.48	-0.01	-7,345.29	77.42	300.00	176.21	123.79	2.423		
19,200.00	12,000.00	18,880.10	11,700.00	129.69	129.05	0.00	-7,445.29	78.15	300.00	174.77	125.23	2.396		
19,300.00	12,000.00	18,980.10	11,700.00	131.25	130.62	0.00	-7,545.29	78.88	300.00	173.33	126.67	2.368		
19,400.00	12,000.00	19,080.10	11,700.00	132.82	132.19	0.00	-7,645.29	79.60	300.00	171.89	128.11	2.342		
19,500.00	12,000.00	19,180.10	11,700.00	134.39	133.76	0.00	-7,745.28	80.33	300.00	170.44	129.56	2.316		
19,600.00	12,000.00	19,280.10	11,700.00	135.96	135.33	0.00	-7,845.28	81.05	300.00	168.99	131.01	2.290		
19,700.00	12,000.00	19,380.10	11,700.00	137.53	136.91	0.00	-7,945.28	81.78	300.00	167.54	132.46	2.265		
19,800.00	12,000.00	19,480.10	11,700.00	139.10	138.48	0.00	-8,045.27	82.50	300.00	166.08	133.92	2.240		
19,882.33	12,000.00	19,562.43	11,700.00	140.26	139.78	0.00	-8,127.60	83.10	300.00	165.18	134.82	2.225		



GATES E & S NORTH AMERICA, INC.
7603 Prairie Oak Dr.
Houston, TX 77086

PHONE: 281-602-4119
FAX:
EMAIL: Troy.Schmidt@gat
WEB: www.gates.com

10K ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	A-7 AUSTIN INC DBA AUSTIN HOSE	Test Date:	10/3/2017
Customer Ref. :	4086301	Hose Serial No.:	H-100317-2
Invoice No. :	508588	Created By:	Irene Pizana

Product Description:	10K3.035.0CM4.1/16FLGE/E		
End Fitting 1 :	4 -1/16 10K FLANGE - FIXED	End Fitting 2 :	4 -1/16 10K FLANGE - FLOATING
Gates Part No. :	68603010-9710398	Assembly Code :	L39789092117H-100317-2
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has successfully passed all pressure testing requirements set forth in Section 9.7.7 and Table 10 of API 7K, Sixth Edition (December 2015).

Quality:	QUALITY
Date :	10/3/2017
Signature :	

Production:	PRODUCTION
Date :	10/3/2017
Signature :	

Form PTC - 01 Rev.0 2





POWERING PROGRESS™

Gates E&S North America, Inc.
7603 Prairie Oak Dr.
Houston, TX. 77086
PHONE :
FAX:
Troy.Schmidt@gates.com

CERTIFICATE OF CONFORMANCE

This is to verify that all Parts and/or Materials included in this shipment have been manufactured and/or processed in Conformance with applicable drawings and specifications, and that Records of Required Tests are on file and subject to examination. The following items were assembled at **Gates E & S, North America Inc.**, facilities in Houston, TX, USA. This hose assembly was designed and manufactured to meet requirements of API Spec 7K.

CUSTOMER: A-7 AUSTIN INC DBA AUSTIN HOSE
CUSTOMERS P.O.#: 4086301
PART DESCRIPTION: 10K3.035.0CM4.1/16FLGE/E
SALES ORDER #: 508588
QUANTITY: 1
SERIAL #: H-100317-2

SIGNATURE:

TITLE:

QUALITY ASSURANCE

DATE:

10/3/2017