

HOBBS OCD

OCT 29 2018

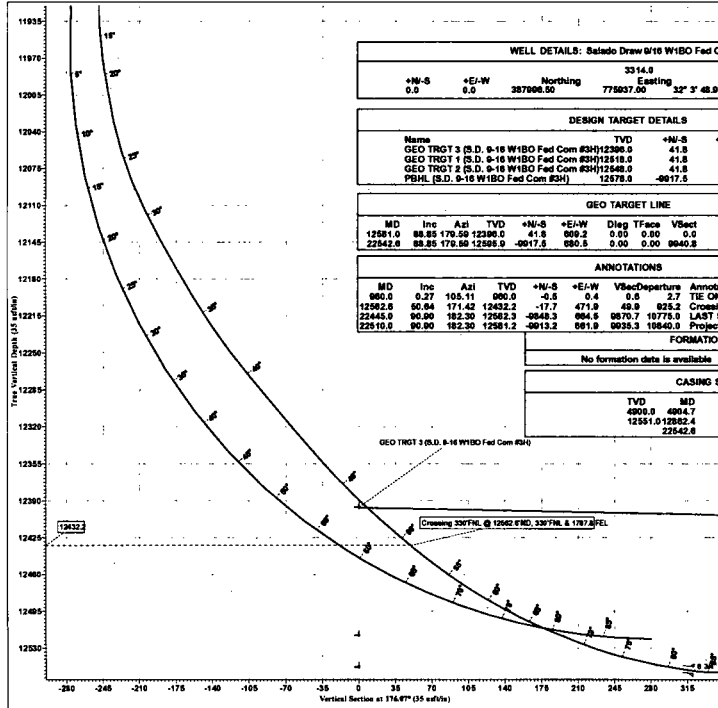
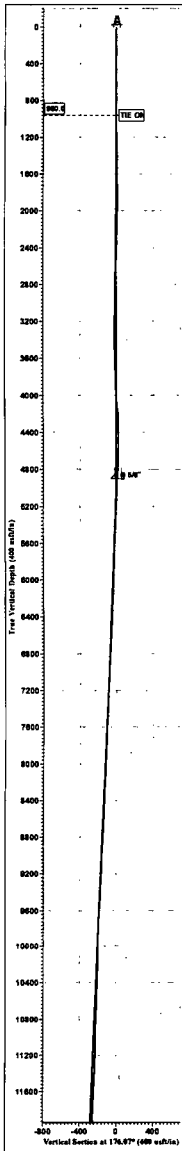
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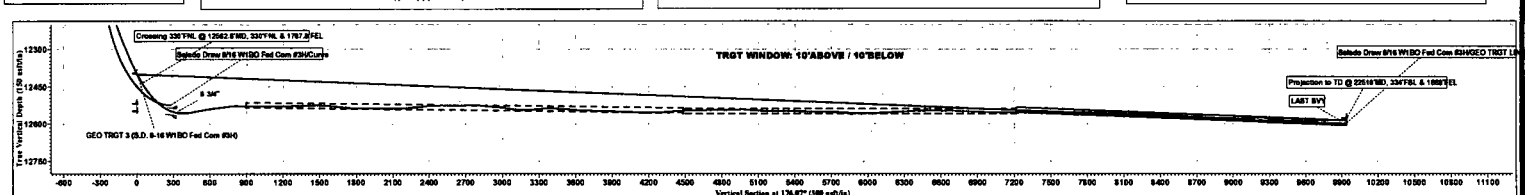
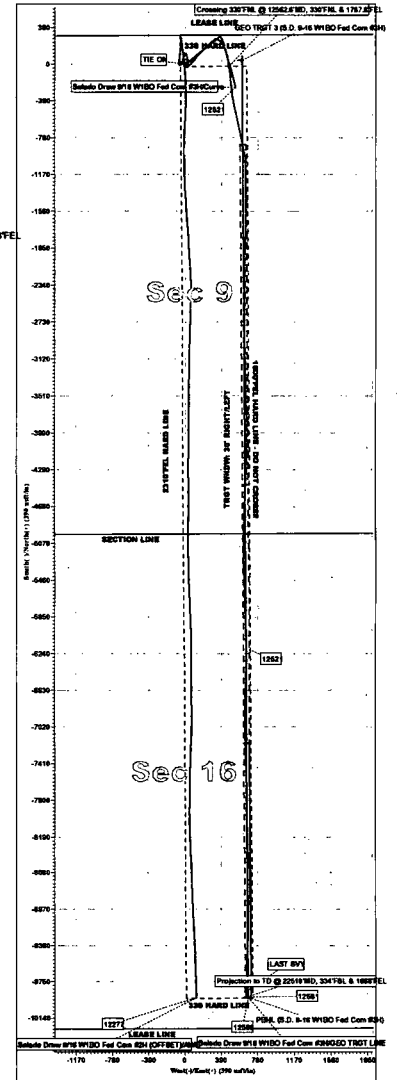


Mewbourne Oil Co.
Project: Lea County, NM (NAD 83)
Site: (Salado Draw) Sec-9, T-28-S, R-33-E
Well: Salado Draw #18 W180 Fed Com #3H
Wellbore: OWB
Design: AWB
Lat: 32° 3' 48.916 N
Long: 103° 20' 33.357 W
Pad GL: 3314.0
KB: KB @ 3341.0uoft (Patterson 231)

INTREPID



WELL DETAILS: Salado Draw #18 W180 Fed Com #3H				
3314.0				
+N-S	+E-W	North	East	Latitude
0.0	0.0	387906.50	775837.50	32° 3' 48.916 N 103° 20' 33.357 W
DESIGN TARGET DETAILS				
Name	TVD	+N-S	+E-W	North
GEO TRGT 3 (S.D. 8-16 W180 Fed Com #3H)12386.0	41.8	609.2	388038.30	776548.23
GEO TRGT 1 (S.D. 8-16 W180 Fed Com #3H)12518.0	41.8	609.2	388038.30	776548.23
GEO TRGT 2 (S.D. 8-16 W180 Fed Com #3H)12646.0	41.8	609.2	388038.30	776548.23
PSHL (S.D. 8-16 W180 Fed Com #3H)	12378.0	-9017.5	680.5	378079.00 776017.50
GEO TARGET LINE				
MD	Inc	Asl	TVD	+N-S
12581.0	88.85	170.50	12386.0	41.8
22542.0	88.85	170.50	12386.0	-9017.5
0.0	0.0	0.0	0.0	0.0
ANNOTATIONS				
MD	Inc	Asl	TVD	+N-S
860.0	9.27	105.11	860.0	-0.6
12565.0	50.64	171.42	12432.2	-17.7
22445.0	90.80	182.30	12562.3	-846.3
22510.0	90.90	182.30	12581.2	-891.3
0.0	0.0	0.0	0.0	0.0
FORMATION TOPS				
No formation data is available				
CASING SHOES				
TVD	MD	Name	Size	
4905.0	4904.7	9 5/8"	9-5/8	
12551.0	12552.4	8 3/4"	8-3/4	
22542.6		6 1/8"	6-1/8	





Mewbourne Oil Co.

Lea County, NM (NAD 83)

(Salado Draw) Sec-9_T-26-S_R-33-E

Salado Draw 9/16 W1BO Fed Com #3H

API# 30-025-44540

OWB

Design: AWB

Standard Survey Report

21 May, 2018





Intrepid Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Salado Draw 9/16 W1BO Fed Com #3H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB @ 3341.0usft (Patterson 231)
Site:	(Salado Draw) Sec-9_T-26-S_R-33-E	MD Reference:	KB @ 3341.0usft (Patterson 231)
Well:	Salado Draw 9/16 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD 83)		
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	(Salado Draw) Sec-9_T-26-S_R-33-E		
Site Position:		Northing:	387,996.50 usft
From:	Map	Easting:	775,937.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 3' 48.915 N
		Longitude:	103° 26' 33.357 W
		Grid Convergence:	0.47 °

Well	Salado Draw 9/16 W1BO Fed Com #3H		
Well Position	+N/-S	0.0 usft	Northing: 387,996.50 usft
	+E/-W	0.0 usft	Easting: 775,937.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 3' 48.915 N
		Longitude:	103° 26' 33.357 W
		Ground Level:	3,314.0 usft

Wellbore	OWB
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	03/28/18	6.80	59.93	47,777.13995073

Design	AWB
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Audit Notes:	
Version:	1.0
Phase:	ACTUAL
Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	176.07

Survey Program	Date	05/21/18			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	960.0	Phoenix Gyro (OWB)	GYRO-NS	OWSG Gyrocompass Gyro	
961.0	22,510.0	Intrepid MWD (OWB)	MWD	OWSG MWD - Standard	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.18	288.19	100.0	0.0	-0.1	-0.1	0.18	0.18	0.00	
200.0	0.21	43.22	200.0	0.2	-0.2	-0.2	0.33	0.03	115.03	
300.0	0.23	155.67	300.0	0.2	0.0	-0.2	0.37	0.02	112.45	
400.0	0.19	88.99	400.0	0.0	0.3	0.0	0.23	-0.04	-66.68	
500.0	0.10	327.39	500.0	0.1	0.4	-0.1	0.26	-0.09	-121.60	
600.0	0.04	46.35	600.0	0.2	0.4	-0.1	0.10	-0.06	78.96	
700.0	0.06	276.13	700.0	0.2	0.4	-0.2	0.09	0.02	-130.22	
800.0	0.27	202.09	800.0	0.0	0.2	0.0	0.26	0.21	-74.04	
900.0	0.22	151.83	900.0	-0.4	0.2	0.4	0.21	-0.05	-50.26	



Intrepid Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Salado Draw 9/16 W1BO Fed Com #3H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB @ 3341.0usft (Patterson 231)
Site:	(Salado Draw) Sec-9_T-26-S_R-33-E	MD Reference:	KB @ 3341.0usft (Patterson 231)
Well:	Salado Draw 9/16 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
960.0	0.27	105.11	960.0	-0.5	0.4	0.6	0.33	0.08	-77.87
TIE ON									
1,144.0	1.50	168.20	1,144.0	-3.0	1.3	3.1	0.76	0.67	34.29
1,236.0	1.20	181.60	1,235.9	-5.1	1.5	5.2	0.47	-0.33	14.57
1,330.0	1.80	178.80	1,329.9	-7.6	1.5	7.7	0.64	0.64	-2.98
1,425.0	1.10	157.10	1,424.9	-9.9	1.9	10.0	0.92	-0.74	-22.84
1,520.0	1.10	129.70	1,519.9	-11.4	3.0	11.5	0.55	0.00	-28.84
1,614.0	0.90	137.80	1,613.9	-12.5	4.2	12.7	0.26	-0.21	8.62
1,708.0	0.90	127.90	1,707.8	-13.5	5.3	13.8	0.17	0.00	-10.53
1,803.0	0.80	98.50	1,802.8	-14.0	6.5	14.5	0.47	-0.11	-30.95
1,901.0	1.20	107.70	1,900.8	-14.5	8.1	15.0	0.44	0.41	9.39
1,995.0	1.40	77.40	1,994.8	-14.5	10.2	15.2	0.75	0.21	-32.23
2,090.0	1.80	61.30	2,089.8	-13.5	12.6	14.4	0.63	0.42	-16.95
2,185.0	2.10	61.40	2,184.7	-12.0	15.5	13.0	0.32	0.32	0.11
2,279.0	2.20	47.50	2,278.6	-9.9	18.3	11.2	0.56	0.11	-14.79
2,374.0	2.70	49.70	2,373.5	-7.3	21.4	8.7	0.54	0.53	2.32
2,469.0	3.50	31.10	2,468.4	-3.3	24.6	5.0	1.34	0.84	-19.58
2,562.0	4.00	19.50	2,561.2	2.2	27.1	-0.3	0.97	0.54	-12.47
2,657.0	3.00	2.50	2,656.0	7.8	28.3	-5.8	1.51	-1.05	-17.89
2,752.0	2.00	304.50	2,751.0	11.2	27.1	-9.3	2.71	-1.05	-61.05
2,847.0	2.90	273.70	2,845.9	12.3	23.3	-10.7	1.65	0.95	-32.42
2,942.0	2.20	274.00	2,940.8	12.6	19.1	-11.2	0.74	-0.74	0.32
3,036.0	1.50	273.90	3,034.7	12.8	16.1	-11.6	0.74	-0.74	-0.11
3,132.0	1.40	263.00	3,130.7	12.7	13.7	-11.8	0.31	-0.10	-11.35
3,226.0	1.30	259.60	3,224.7	12.4	11.5	-11.6	0.14	-0.11	-3.62
3,322.0	1.50	251.10	3,320.6	11.8	9.2	-11.1	0.30	0.21	-8.85
3,417.0	1.70	251.30	3,415.6	10.9	6.7	-10.4	0.21	0.21	0.21
3,511.0	2.60	268.40	3,509.5	10.4	3.3	-10.2	1.17	0.96	18.19
3,606.0	2.20	254.00	3,604.5	9.9	-0.7	-9.9	0.76	-0.42	-15.16
3,701.0	1.80	237.80	3,699.4	8.6	-3.7	-8.8	0.72	-0.42	-17.05
3,796.0	1.70	239.00	3,794.4	7.0	-6.1	-7.4	0.11	-0.11	1.26
3,891.0	2.40	218.80	3,889.3	4.8	-8.6	-5.3	1.05	0.74	-21.26
3,986.0	3.90	181.10	3,984.2	0.0	-9.9	-0.7	2.61	1.58	-39.68
4,081.0	5.20	150.30	4,078.9	-7.0	-7.8	6.4	2.86	1.37	-32.42
4,176.0	5.80	136.50	4,173.4	-14.2	-2.4	14.0	1.52	0.63	-14.53
4,271.0	5.50	125.90	4,268.0	-20.4	4.6	20.6	1.14	-0.32	-11.16
4,365.0	4.70	121.90	4,361.6	-25.0	11.5	25.8	0.93	-0.85	-4.26
4,460.0	3.70	93.90	4,456.4	-27.3	17.9	28.5	2.37	-1.05	-29.47
4,555.0	4.00	56.70	4,551.2	-25.7	23.7	27.3	2.60	0.32	-39.16
4,650.0	4.70	46.70	4,645.9	-21.2	29.3	23.2	1.08	0.74	-10.53
4,745.0	3.80	44.70	4,740.6	-16.3	34.4	18.6	0.96	-0.95	-2.11
4,840.0	3.50	53.60	4,835.4	-12.3	38.9	15.0	0.67	-0.32	9.37
4,877.0	3.70	54.20	4,872.4	-11.0	40.8	13.7	0.55	0.54	1.62



Intrepid Survey Report



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Project:	Lea County, NM (NAD 83)	TVD Reference:	KB @ 3341.0usft (Patterson 231)
Site:	(Salado Draw) Sec-9_T-26-S_R-33-E	MD Reference:	KB @ 3341.0usft (Patterson 231)
Well:	Salado Draw 9/16 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,025.0	4.10	51.20	5,020.0	-4.9	48.8	8.2	0.30	0.27	-2.03
5,120.0	4.00	50.40	5,114.8	-0.6	54.0	4.3	0.12	-0.11	-0.84
5,215.0	3.90	50.80	5,209.6	3.5	59.0	0.5	0.11	-0.11	0.42
5,310.0	3.80	37.00	5,304.3	8.1	63.4	-3.7	0.98	-0.11	-14.53
5,405.0	3.60	39.70	5,399.1	12.9	67.2	-8.3	0.28	-0.21	2.84
5,499.0	3.30	39.40	5,493.0	17.3	70.8	-12.4	0.32	-0.32	-0.32
5,594.0	3.20	41.20	5,587.8	21.4	74.3	-16.2	0.15	-0.11	1.89
5,690.0	3.30	46.20	5,683.7	25.3	78.1	-19.9	0.31	0.10	5.21
5,784.0	3.30	49.20	5,777.5	28.9	82.1	-23.2	0.18	0.00	3.19
5,879.0	2.90	49.20	5,872.4	32.3	86.0	-26.3	0.42	-0.42	0.00
5,973.0	2.60	32.60	5,966.3	35.6	88.9	-29.5	0.90	-0.32	-17.66
6,068.0	2.70	29.70	6,061.2	39.4	91.2	-33.1	0.18	0.11	-3.05
6,162.0	2.70	32.60	6,155.1	43.2	93.5	-36.7	0.15	0.00	3.09
6,257.0	2.50	36.80	6,250.0	46.7	95.9	-40.1	0.29	-0.21	4.42
6,352.0	2.40	34.30	6,344.9	50.0	98.3	-43.2	0.15	-0.11	-2.63
6,447.0	3.60	33.60	6,439.7	54.2	101.1	-47.1	1.26	1.26	-0.74
6,542.0	4.00	30.80	6,534.5	59.5	104.4	-52.2	0.46	0.42	-2.95
6,636.0	3.90	30.40	6,628.3	65.1	107.7	-57.5	0.11	-0.11	-0.43
6,730.0	3.60	30.00	6,722.1	70.4	110.8	-62.6	0.32	-0.32	-0.43
6,826.0	4.00	44.40	6,817.9	75.4	114.6	-67.4	1.07	0.42	15.00
6,920.0	3.60	42.80	6,911.7	79.9	118.9	-71.6	0.44	-0.43	-1.70
7,015.0	3.40	42.70	7,006.5	84.1	122.9	-75.5	0.21	-0.21	-0.11
7,110.0	3.10	46.30	7,101.4	88.0	126.6	-79.1	0.38	-0.32	3.79
7,204.0	2.60	45.60	7,195.2	91.2	130.0	-82.1	0.53	-0.53	-0.74
7,299.0	2.70	39.20	7,290.1	94.5	133.0	-85.2	0.33	0.11	-6.74
7,394.0	2.50	37.60	7,385.0	97.9	135.6	-88.3	0.22	-0.21	-1.68
7,489.0	3.30	42.20	7,479.9	101.5	138.7	-91.8	0.88	0.84	4.84
7,582.0	3.00	41.60	7,572.8	105.3	142.2	-95.4	0.32	-0.32	-0.65
7,678.0	2.50	46.30	7,668.7	108.7	145.3	-98.5	0.57	-0.52	4.90
7,772.0	3.10	53.90	7,762.6	111.6	148.9	-101.1	0.75	0.64	8.09
7,867.0	4.00	52.40	7,857.4	115.1	153.6	-104.3	0.95	0.95	-1.58
7,961.0	4.40	47.40	7,951.1	119.5	158.8	-108.4	0.58	0.43	-5.32
8,057.0	3.80	47.70	8,046.9	124.2	163.9	-112.7	0.63	-0.63	0.31
8,152.0	3.50	49.50	8,141.7	128.2	168.4	-116.4	0.34	-0.32	1.89
8,248.0	3.90	47.90	8,237.5	132.3	173.1	-120.1	0.43	0.42	-1.67
8,343.0	3.60	48.20	8,332.3	136.4	177.7	-123.9	0.32	-0.32	0.32
8,438.0	3.00	48.20	8,427.1	140.1	181.8	-127.3	0.63	-0.63	0.00
8,533.0	3.70	38.30	8,522.0	144.1	185.5	-131.1	0.95	0.74	-10.42
8,627.0	3.50	36.90	8,615.8	148.8	189.1	-135.5	0.23	-0.21	-1.49
8,722.0	4.10	43.40	8,710.6	153.6	193.2	-140.0	0.78	0.63	6.84
8,817.0	4.00	45.00	8,805.3	158.4	197.9	-144.5	0.16	-0.11	1.68
8,911.0	3.40	39.00	8,899.1	162.9	201.9	-148.7	0.76	-0.64	-6.38
9,006.0	3.50	47.50	8,994.0	167.0	205.9	-152.6	0.55	0.11	8.95



Intrepid Survey Report



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Design:	AWB	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,101.0	2.50	42.60	9,088.8	170.5	209.4	-155.8	1.09	-1.05	-5.16
9,195.0	2.60	37.30	9,182.7	173.7	212.1	-158.8	0.27	0.11	-5.64
9,290.0	3.90	46.20	9,277.6	177.7	215.7	-162.5	1.46	1.37	9.37
9,385.0	3.70	40.40	9,372.4	182.2	220.0	-166.8	0.46	-0.21	-6.11
9,480.0	4.90	42.90	9,467.1	187.6	224.8	-171.7	1.28	1.26	2.63
9,575.0	5.30	37.90	9,561.7	194.0	230.2	-177.8	0.63	0.42	-5.26
9,669.0	4.80	53.60	9,655.4	199.7	236.1	-183.1	1.56	-0.53	16.70
9,764.0	4.20	59.30	9,750.1	203.9	242.3	-186.8	0.79	-0.63	6.00
9,860.0	3.10	56.70	9,845.9	207.1	247.5	-189.7	1.16	-1.15	-2.71
9,953.0	1.80	78.40	9,938.8	208.8	251.0	-191.1	1.69	-1.40	23.33
10,048.0	1.20	87.80	10,033.8	209.1	253.4	-191.3	0.68	-0.63	9.89
10,143.0	2.00	18.30	10,128.7	210.7	255.0	-192.8	2.04	0.84	-73.16
10,237.0	1.90	41.50	10,222.7	213.5	256.5	-195.4	0.84	-0.11	24.68
10,332.0	2.90	28.10	10,317.6	216.8	258.7	-198.5	1.20	1.05	-14.11
10,427.0	3.80	41.40	10,412.4	221.2	261.9	-202.8	1.25	0.95	14.00
10,522.0	3.60	53.80	10,507.2	225.4	266.4	-206.6	0.87	-0.21	13.05
10,617.0	2.50	63.30	10,602.1	228.1	270.6	-209.0	1.27	-1.16	10.00
10,712.0	3.60	52.60	10,697.0	230.8	274.9	-211.4	1.30	1.16	-11.26
10,807.0	2.30	46.70	10,791.8	233.9	278.6	-214.3	1.40	-1.37	-6.21
10,901.0	1.00	8.30	10,885.8	236.0	280.1	-216.3	1.74	-1.38	-40.85
10,996.0	1.30	72.90	10,980.8	237.2	281.3	-217.3	1.32	0.32	68.00
11,091.0	2.30	56.40	11,075.7	238.5	283.9	-218.5	1.18	1.05	-17.37
11,187.0	2.90	58.30	11,171.6	240.9	287.5	-220.6	0.63	0.63	1.98
11,281.0	4.00	48.60	11,265.5	244.3	292.0	-223.7	1.32	1.17	-10.32
11,377.0	3.80	39.10	11,361.2	249.0	296.6	-228.1	0.70	-0.21	-9.90
11,436.0	3.60	39.50	11,420.1	251.9	299.0	-230.9	0.34	-0.34	0.68
11,547.0	2.70	35.50	11,531.0	256.7	302.7	-235.4	0.83	-0.81	-3.60
11,642.0	5.60	40.90	11,625.7	262.1	307.0	-240.4	3.08	3.05	5.68
11,737.0	4.00	59.90	11,720.4	267.2	312.9	-245.2	2.35	-1.68	20.00
11,831.0	4.10	64.90	11,814.1	270.3	318.8	-247.8	0.39	0.11	5.32
11,926.0	8.40	87.70	11,908.6	272.0	328.8	-248.9	5.14	4.53	24.00
11,958.0	13.70	99.70	11,940.0	271.5	334.9	-247.9	17.97	16.56	37.50
11,990.0	18.90	113.20	11,970.7	268.8	343.4	-244.6	20.01	16.25	42.19
12,021.0	21.20	111.70	11,999.8	264.7	353.2	-239.9	7.60	7.42	-4.84
12,053.0	22.90	117.10	12,029.5	259.8	364.2	-234.2	8.26	5.31	16.88
12,085.0	24.70	126.60	12,058.7	252.9	375.1	-226.7	13.22	5.63	29.69
12,116.0	26.20	140.70	12,086.8	243.8	384.6	-216.9	20.09	4.84	45.48
12,148.0	29.80	147.60	12,115.0	231.6	393.4	-204.1	15.12	11.25	21.56
12,180.0	31.30	153.00	12,142.6	217.5	401.4	-189.5	9.77	4.69	16.88
12,212.0	32.20	148.70	12,169.8	202.8	409.6	-174.2	7.61	2.81	-13.44
12,243.0	33.60	151.80	12,195.8	188.1	417.9	-159.1	7.06	4.52	10.00
12,275.0	36.00	154.70	12,222.1	171.8	426.1	-142.3	9.11	7.50	9.06
12,307.0	39.10	161.40	12,247.5	153.8	433.4	-123.7	16.01	9.69	20.94
12,338.0	40.10	164.00	12,271.4	134.9	439.3	-104.5	6.24	3.23	8.39



Intrepid Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Salado Draw 9/16 W1BO Fed Com #3H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB @ 3341.0usft (Patterson 231)
Site:	(Salado Draw) Sec-9_T-26-S_R-33-E	MD Reference:	KB @ 3341.0usft (Patterson 231)
Well:	Salado Draw 9/16 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,370.0	41.10	164.50	12,295.7	114.9	444.9	-84.1	3.29	3.13	1.56
12,402.0	40.40	165.80	12,319.9	94.7	450.3	-63.6	3.44	-2.19	4.06
12,433.0	41.70	167.20	12,343.3	74.9	455.0	-43.5	5.14	4.19	4.52
12,465.0	44.00	169.00	12,366.7	53.6	459.5	-22.0	8.14	7.19	5.63
12,497.0	47.20	169.20	12,389.1	31.1	463.8	0.7	10.01	10.00	0.63
12,529.0	49.00	170.90	12,410.5	7.7	467.9	24.4	6.88	5.63	5.31
12,560.0	50.40	171.40	12,430.5	-15.7	471.6	47.9	4.68	4.52	1.61
12,562.6	50.64	171.42	12,432.2	-17.7	471.9	49.9	9.37	9.35	0.67
Crossing 330°FNL @ 12562.6°MD, 330°FNL & 1787.8°FEL									
12,591.0	53.30	171.60	12,449.7	-39.8	475.2	72.2	9.37	9.35	0.64
12,624.0	56.50	173.60	12,468.7	-66.6	478.6	99.2	10.89	9.70	6.06
12,655.0	60.20	174.00	12,484.9	-92.8	481.5	125.5	11.99	11.94	1.29
12,687.0	64.20	173.70	12,499.9	-120.9	484.5	153.8	12.53	12.50	-0.94
12,719.0	66.70	174.40	12,513.1	-149.9	487.5	182.9	8.06	7.81	2.19
12,750.0	69.50	175.20	12,524.7	-178.5	490.1	211.7	9.34	9.03	2.58
12,782.0	73.80	175.40	12,534.8	-208.8	492.6	242.0	13.45	13.44	0.63
12,813.0	77.30	175.00	12,542.5	-238.7	495.1	272.0	11.36	11.29	-1.29
12,845.0	80.80	175.40	12,548.6	-270.0	497.8	303.4	11.01	10.94	1.25
12,877.0	85.10	173.10	12,552.5	-301.6	500.9	335.2	15.21	13.44	-7.19
12,972.0	95.90	169.10	12,551.7	-395.3	515.6	429.7	12.12	11.37	-4.21
13,066.0	94.60	166.80	12,543.1	-486.8	535.2	522.3	2.80	-1.38	-2.45
13,161.0	93.60	167.60	12,536.3	-579.2	556.1	615.9	1.35	-1.05	0.84
13,256.0	93.40	166.90	12,530.5	-671.7	577.1	709.6	0.77	-0.21	-0.74
13,319.0	93.40	166.40	12,526.8	-732.9	591.6	771.7	0.79	0.00	-0.79
13,350.0	90.20	166.00	12,525.8	-763.0	599.0	802.2	10.40	-10.32	-1.29
13,444.0	89.10	168.50	12,526.4	-854.7	619.7	895.1	2.91	-1.17	2.66
13,539.0	90.00	173.20	12,527.1	-948.4	634.8	989.6	5.04	0.95	4.95
13,633.0	90.50	176.40	12,526.7	-1,042.0	643.3	1,083.6	3.45	0.53	3.40
13,729.0	90.20	179.30	12,526.1	-1,137.9	646.9	1,179.6	3.04	-0.31	3.02
13,823.0	90.80	180.20	12,525.3	-1,231.9	647.4	1,273.4	1.15	0.64	0.96
13,918.0	90.50	179.60	12,524.2	-1,326.9	647.5	1,368.1	0.71	-0.32	-0.63
14,013.0	90.80	179.20	12,523.1	-1,421.9	648.5	1,463.0	0.53	0.32	-0.42
14,116.0	88.00	180.40	12,524.2	-1,524.9	648.9	1,565.7	2.96	-2.72	1.17
14,211.0	86.20	179.50	12,529.0	-1,619.8	649.0	1,660.4	2.12	-1.89	-0.95
14,306.0	88.50	181.00	12,533.4	-1,714.7	648.5	1,755.0	2.89	2.42	1.58
14,402.0	90.40	183.20	12,534.3	-1,810.6	645.0	1,850.5	3.03	1.98	2.29
14,496.0	89.60	182.30	12,534.3	-1,904.5	640.5	1,943.8	1.28	-0.85	-0.96
14,591.0	88.40	180.70	12,536.0	-1,999.4	638.0	2,038.4	2.11	-1.26	-1.68
14,686.0	91.50	180.10	12,536.1	-2,094.4	637.4	2,133.1	3.32	3.26	-0.63
14,781.0	91.80	179.10	12,533.3	-2,189.4	638.0	2,227.9	1.10	0.32	-1.05
14,875.0	93.30	178.90	12,529.2	-2,283.2	639.7	2,321.7	1.61	1.60	-0.21
14,970.0	92.50	179.90	12,524.4	-2,378.1	640.7	2,416.4	1.35	-0.84	1.05
15,064.0	89.10	181.10	12,523.0	-2,472.1	639.8	2,510.1	3.84	-3.62	1.28



Intrepid Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Salado Draw 9/16 W1BO Fed Com #3H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB @ 3341.0usft (Patterson 231)
Site:	(Salado Draw) Sec-9_T-26-S_R-33-E	MD Reference:	KB @ 3341.0usft (Patterson 231)
Well:	Salado Draw 9/16 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,159.0	89.80	179.00	12,524.0	-2,567.1	639.8	2,604.9	2.33	0.74	-2.21
15,254.0	91.60	181.00	12,522.8	-2,662.1	639.8	2,699.6	2.83	1.89	2.11
15,348.0	88.50	181.50	12,522.7	-2,756.0	637.7	2,793.2	3.34	-3.30	0.53
15,443.0	87.30	179.60	12,526.2	-2,851.0	636.8	2,887.9	2.36	-1.26	-2.00
15,538.0	87.50	178.80	12,530.5	-2,945.8	638.1	2,982.6	0.87	0.21	-0.84
15,633.0	84.70	178.10	12,537.0	-3,040.6	640.7	3,077.3	3.04	-2.95	-0.74
15,727.0	90.60	178.80	12,540.8	-3,134.4	643.2	3,171.1	6.32	6.28	0.74
15,822.0	92.40	178.90	12,538.3	-3,229.4	645.1	3,266.0	1.90	1.89	0.11
15,917.0	91.60	179.20	12,535.0	-3,324.3	646.7	3,360.8	0.90	-0.84	0.32
16,011.0	87.90	179.20	12,535.4	-3,418.3	648.0	3,454.6	3.94	-3.94	0.00
16,106.0	88.00	178.70	12,538.8	-3,513.2	649.8	3,549.4	0.54	0.11	-0.53
16,200.0	88.60	178.20	12,541.6	-3,607.1	652.3	3,643.3	0.83	0.64	-0.53
16,294.0	89.20	177.70	12,543.4	-3,701.0	655.7	3,737.2	0.83	0.64	-0.53
16,389.0	89.40	178.20	12,544.6	-3,796.0	659.1	3,832.2	0.57	0.21	0.53
16,483.0	88.80	179.50	12,546.1	-3,889.9	660.9	3,926.1	1.52	-0.64	1.38
16,578.0	88.40	181.00	12,548.4	-3,984.9	660.5	4,020.8	1.63	-0.42	1.58
16,673.0	89.40	180.90	12,550.2	-4,079.9	659.0	4,115.4	1.06	1.05	-0.11
16,768.0	89.80	181.20	12,550.9	-4,174.9	657.2	4,210.1	0.53	0.42	0.32
16,862.0	91.40	181.10	12,549.9	-4,268.8	655.3	4,303.7	1.71	1.70	-0.11
16,956.0	92.40	183.00	12,546.8	-4,362.7	652.0	4,397.1	2.28	1.06	2.02
16,988.0	91.10	183.30	12,545.8	-4,394.6	650.2	4,428.8	4.17	-4.06	0.94
17,051.0	91.70	183.10	12,544.2	-4,457.5	646.7	4,491.3	1.00	0.95	-0.32
17,145.0	90.30	182.70	12,542.6	-4,551.4	641.9	4,584.7	1.55	-1.49	-0.43
17,240.0	91.10	182.70	12,541.4	-4,646.3	637.5	4,679.0	0.84	0.84	0.00
17,334.0	89.60	181.10	12,540.9	-4,740.2	634.4	4,772.5	2.33	-1.60	-1.70
17,429.0	91.60	180.50	12,539.9	-4,835.2	633.0	4,867.2	2.20	2.11	-0.63
17,522.0	90.00	180.70	12,538.6	-4,928.2	632.0	4,959.9	1.73	-1.72	0.22
17,616.0	87.40	180.30	12,540.7	-5,022.1	631.2	5,053.6	2.80	-2.77	-0.43
17,710.0	88.30	181.00	12,544.2	-5,116.1	630.2	5,147.2	1.21	0.96	0.74
17,805.0	90.40	180.80	12,545.3	-5,211.1	628.7	5,241.9	2.22	2.21	-0.21
17,902.0	90.30	179.20	12,544.7	-5,308.0	628.7	5,338.6	1.65	-0.10	-1.65
17,997.0	89.20	177.90	12,545.1	-5,403.0	631.1	5,433.5	1.79	-1.16	-1.37
18,092.0	89.10	178.00	12,546.5	-5,497.9	634.5	5,528.5	0.15	-0.11	0.11
18,186.0	90.40	178.50	12,547.0	-5,591.9	637.3	5,622.4	1.48	1.38	0.53
18,281.0	88.80	177.40	12,547.6	-5,686.8	640.7	5,717.3	2.04	-1.68	-1.16
18,376.0	87.50	177.50	12,550.7	-5,781.7	645.0	5,812.3	1.37	-1.37	0.11
18,471.0	88.40	177.70	12,554.1	-5,876.5	648.9	5,907.2	0.97	0.95	0.21
18,566.0	91.50	177.90	12,554.2	-5,971.5	652.6	6,002.1	3.27	3.26	0.21
18,661.0	91.30	177.10	12,551.8	-6,066.3	656.7	6,097.1	0.87	-0.21	-0.84
18,756.0	92.20	180.20	12,548.9	-6,161.3	659.0	6,191.9	3.40	0.95	3.26
18,851.0	91.40	180.30	12,546.0	-6,256.2	658.6	6,286.6	0.85	-0.84	0.11
18,946.0	91.90	180.70	12,543.2	-6,351.2	657.7	6,381.3	0.67	0.53	0.42
19,041.0	89.50	181.50	12,542.1	-6,446.1	655.9	6,475.9	2.66	-2.53	0.84
19,136.0	89.40	181.80	12,543.0	-6,541.1	653.2	6,570.5	0.33	-0.11	0.32



Intrepid Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Salado Draw 9/16 W1BO Fed Com #3H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB @ 3341.0usft (Patterson 231)
Site:	(Salado Draw) Sec-9_T-26-S_R-33-E	MD Reference:	KB @ 3341.0usft (Patterson 231)
Well:	Salado Draw 9/16 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,231.0	89.90	182.50	12,543.6	-6,636.0	649.6	6,664.9	0.91	0.53	0.74
19,327.0	88.90	180.70	12,544.6	-6,732.0	646.9	6,760.5	2.14	-1.04	-1.88
19,422.0	89.10	180.40	12,546.2	-6,826.9	646.0	6,855.2	0.38	0.21	-0.32
19,517.0	88.70	180.30	12,548.0	-6,921.9	645.4	6,949.9	0.43	-0.42	-0.11
19,612.0	89.50	179.20	12,549.5	-7,016.9	645.8	7,044.7	1.43	0.84	-1.16
19,707.0	90.10	178.30	12,549.9	-7,111.9	647.9	7,139.6	1.14	0.63	-0.95
19,802.0	90.40	177.90	12,549.4	-7,206.8	651.1	7,234.5	0.53	0.32	-0.42
19,897.0	89.30	177.60	12,549.7	-7,301.8	654.8	7,329.5	1.20	-1.16	-0.32
19,992.0	90.00	177.70	12,550.3	-7,396.7	658.7	7,424.4	0.74	0.74	0.11
20,087.0	90.40	178.10	12,549.9	-7,491.6	662.2	7,519.4	0.60	0.42	0.42
20,182.0	90.20	177.80	12,549.4	-7,586.5	665.6	7,614.3	0.38	-0.21	-0.32
20,264.0	91.20	178.20	12,548.4	-7,668.5	668.4	7,696.3	1.31	1.22	0.49
20,372.0	88.50	179.80	12,548.7	-7,776.5	670.3	7,804.1	2.91	-2.50	1.48
20,467.0	89.10	179.50	12,550.7	-7,871.4	670.9	7,898.9	0.71	0.63	-0.32
20,562.0	89.30	179.10	12,552.0	-7,966.4	672.1	7,993.7	0.47	0.21	-0.42
20,657.0	89.10	178.80	12,553.4	-8,061.4	673.8	8,088.6	0.38	-0.21	-0.32
20,752.0	89.00	178.40	12,554.9	-8,156.4	676.1	8,183.5	0.43	-0.11	-0.42
20,847.0	89.00	178.40	12,556.6	-8,251.3	678.8	8,278.4	0.00	0.00	0.00
20,942.0	88.90	177.60	12,558.3	-8,346.2	682.1	8,373.3	0.85	-0.11	-0.84
21,037.0	88.80	177.20	12,560.3	-8,441.1	686.4	8,468.3	0.43	-0.11	-0.42
21,132.0	87.70	178.70	12,563.2	-8,536.0	689.8	8,563.2	1.96	-1.16	1.58
21,227.0	89.40	178.70	12,565.6	-8,630.9	691.9	8,658.1	1.79	1.79	0.00
21,322.0	87.90	181.50	12,567.8	-8,725.9	691.8	8,752.8	3.34	-1.58	2.95
21,417.0	88.30	180.80	12,570.9	-8,820.8	689.9	8,847.4	0.85	0.42	-0.74
21,512.0	89.50	181.00	12,572.8	-8,915.8	688.4	8,942.0	1.28	1.26	0.21
21,607.0	89.40	180.60	12,573.7	-9,010.8	687.1	9,036.7	0.43	-0.11	-0.42
21,702.0	90.50	181.00	12,573.8	-9,105.8	685.7	9,131.4	1.23	1.16	0.42
21,797.0	89.70	182.30	12,573.6	-9,200.7	683.0	9,225.9	1.61	-0.84	1.37
21,892.0	87.60	181.50	12,575.8	-9,295.6	679.8	9,320.4	2.37	-2.21	-0.84
21,987.0	87.60	181.50	12,579.8	-9,390.5	677.4	9,414.9	0.00	0.00	0.00
22,082.0	89.20	182.00	12,582.5	-9,485.4	674.5	9,509.4	1.76	1.68	0.53
22,177.0	89.50	181.20	12,583.5	-9,580.4	671.8	9,603.9	0.90	0.32	-0.84
22,272.0	90.20	181.30	12,583.8	-9,675.4	669.7	9,698.5	0.74	0.74	0.11
22,367.0	90.50	181.70	12,583.2	-9,770.3	667.3	9,793.1	0.53	0.32	0.42
22,445.0	90.90	182.30	12,582.3	-9,848.3	664.5	9,870.7	0.92	0.51	0.77
LAST SVY									
22,510.0	90.90	182.30	12,581.2	-9,913.2	661.9	9,935.3	0.00	0.00	0.00
Projection to TD @ 22510'MD, 334'FSL & 1668'FEL									



Intrepid Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Salado Draw 9/16 W1BO Fed Com #3H
Project:	Lea County, NM (NAD 83)	TVD Reference:	KB @ 3341.0usft (Patterson 231)
Site:	(Salado Draw) Sec-9_T-26-S_R-33-E	MD Reference:	KB @ 3341.0usft (Patterson 231)
Well:	Salado Draw 9/16 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Design Targets

Target Name

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
GEO TRGT 3 (S.D. 9-	-1.15	359.59	12,396.0	41.8	609.2	388,038.30	776,546.23	32° 3' 49.279 N	103° 26' 26.274 W
- actual wellpath misses target center by 145.1usft at 12512.4usft MD (12399.5 TVD, 19.9 N, 465.9 E)									
- Rectangle (sides W60.0 H2,725.0 D20.0)									
GEO TRGT 1 (S.D. 9-	-0.33	359.59	12,518.0	41.8	609.2	388,038.30	776,546.23	32° 3' 49.279 N	103° 26' 26.274 W
- actual wellpath misses target center by 171.0usft at 12585.1usft MD (12446.1 TVD, -35.1 N, 474.5 E)									
- Rectangle (sides W60.0 H3,596.2 D20.0)									
GEO TRGT 2 (S.D. 9-	0.00	359.59	12,548.0	41.8	609.2	388,038.30	776,546.23	32° 3' 49.279 N	103° 26' 26.274 W
- actual wellpath misses target center by 185.0usft at 12595.4usft MD (12452.3 TVD, -43.3 N, 475.7 E)									
- Rectangle (sides W60.0 H2,743.1 D20.0)									
PBHL (S.D. 9-16 W1E	0.32	179.59	12,576.0	-9,917.5	680.5	378,079.00	776,617.50	32° 2' 10.721 N	103° 26' 26.403 W
- actual wellpath misses target center by 19.8usft at 22510.0usft MD (12581.2 TVD, -9913.2 N, 661.9 E)									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
4,904.7	4,900.0	9 5/8"	9-5/8	12-1/4
12,862.4	12,551.0	8 3/4"	8-3/4	9-5/8
22,542.6		6 1/8"	6-1/8	8-3/4

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
960.0	960.0	-0.5	0.4	TIE ON
12,562.6	12,432.2	-17.7	471.9	Crossing 330'FNL @ 12562.6'MD, 330'FNL & 1787.8'FEL
22,445.0	12,582.3	-9,848.3	664.5	LAST SVY
22,510.0	12,581.2	-9,913.2	661.9	Projection to TD @ 22510'MD, 334'FSL & 1668'FEL

Checked By: _____ Approved By: _____ Date: _____