

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-19 GOURD 1930 PAD

GOURD 1930-04H

Wellbore #1

Plan: Design #1

Standard Planning Report

21 May, 2019

Project: WATTENBERG FIELD
Site: 1N-64W-19 GOURD 1930 PAD
Well: GOURD 1930-04H
Wellbore: Wellbore #1
Design: Design #1

VERDAD RESOURCES

CASING DETAILS

TVD	MD	Name	Size
1700.00	1711.85	9 5/8"	9-5/8

SHL
1943' FSL
1635' FWL

LP
2180' FSL
1630' FWL

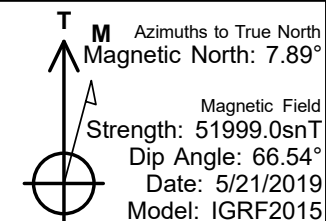
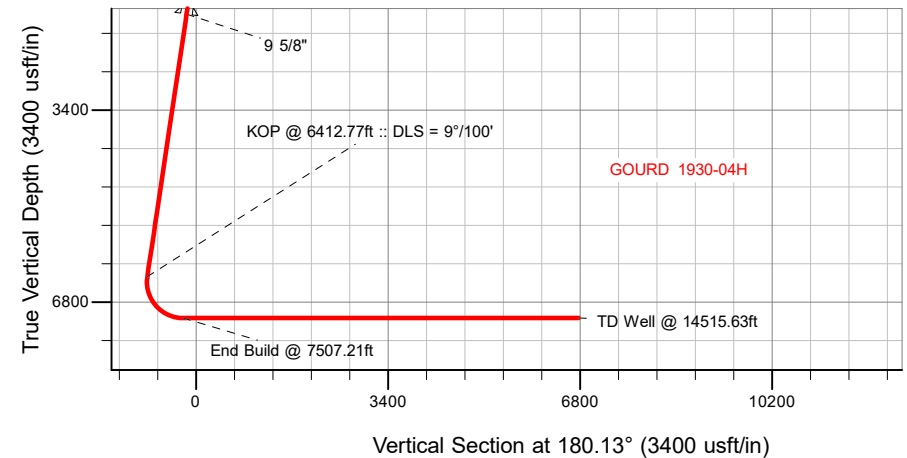
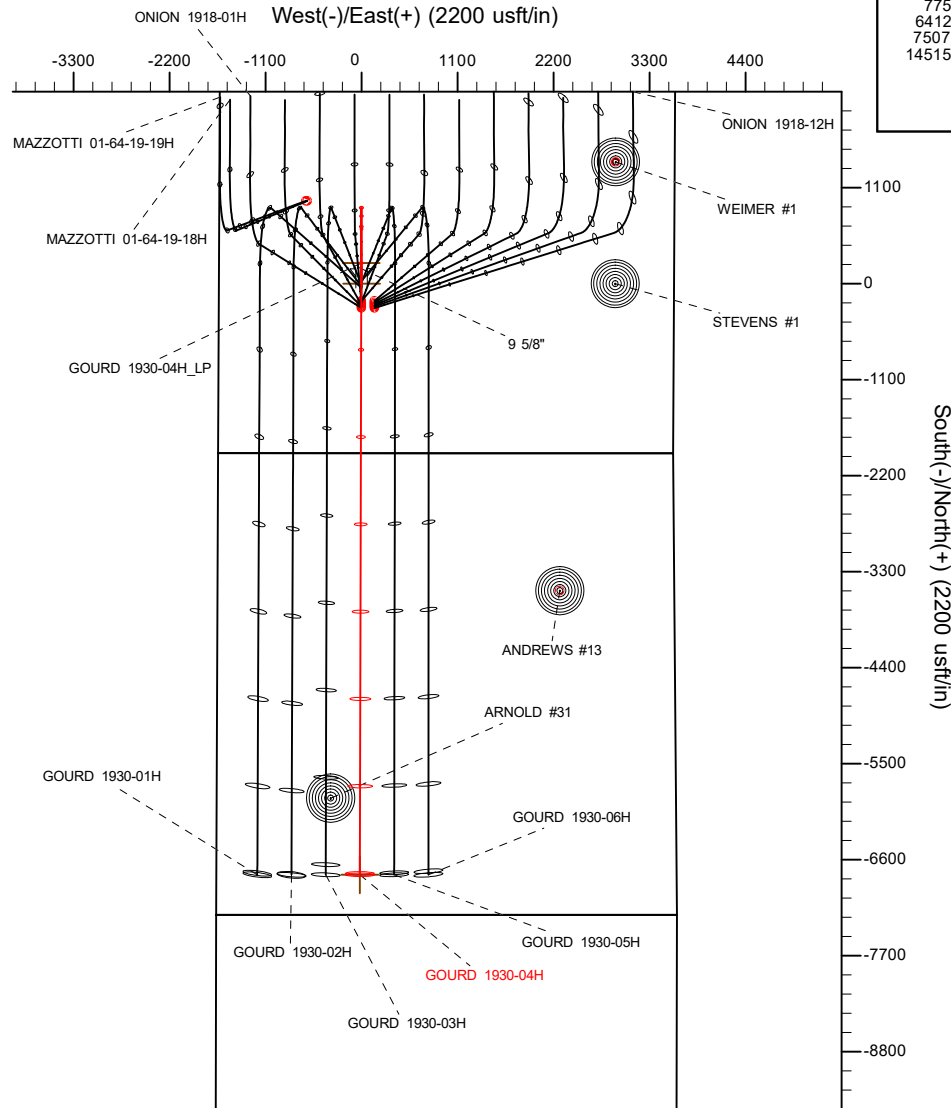
BHL
460' FSL
1647' FWL

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	
775.00	8.50	359.90	773.44	31.47	-0.05	2.00	359.90	-31.47	
6412.77	8.50	359.90	6349.29	864.78	-1.51	0.00	0.00	-864.78	
7507.21	90.00	180.13	7080.00	235.16	-3.32	9.00	-179.77	-235.15	
14515.63	90.00	180.13	7080.00	-6773.24	-18.74	0.00	0.00	6773.27	GOURD 1930-04H_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
GOURD 1930-04H_SHL	0.00	0.00	0.00	40.034889	-104.596972
GOURD 1930-04H_BHL	7080.00	-6773.24	-18.74	40.016295	-104.597039



WELL DETAILS: GOURD 1930-04H

GL = 5012'

RKB = 24' @ 5036.00usft (RIG)

Plan: Design #1 (GOURD 1930-04H/Wellbore #1)

Date: 5/22/2019

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well GOURD 1930-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5036.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5036.00usft (RIG)
Site:	1N-64W-19 GOURD 1930 PAD	North Reference:	True
Well:	GOURD 1930-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	WATTENBERG FIELD		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		1N-64W-19 GOURD 1930 PAD			
Site Position:		Northing:	1,256,795.51 usft	Latitude:	40.034757
From:	Lat/Long	Easting:	3,252,852.90 usft	Longitude:	-104.596973
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.58 °

Well		GOURD 1930-04H				
Well Position	+N/-S	47.97 usft	Northing:	1,256,843.48 usft	Latitude:	40.034889
	+E/-W	0.22 usft	Easting:	3,252,852.63 usft	Longitude:	-104.596973
Position Uncertainty		3.28 usft	Wellhead Elevation:		Ground Level:	5,012.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/21/2019	7.89	66.54	51,998.97472879

Design	Design #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	180.13

Plan Survey Tool Program	Date	5/21/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	1,700.00	Design #1 (Wellbore #1)	ISCWSA REV 2 MWD Fixed:v2:standard declination
2	1,700.00	14,515.63	Design #1 (Wellbore #1)	ISCWSA REV 2 MWD Fixed:v2:standard declination

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00	
775.00	8.50	359.90	773.44	31.47	-0.05	2.00	2.00	0.00	359.90	
6,412.77	8.50	359.90	6,349.29	864.78	-1.51	0.00	0.00	0.00	0.00	
7,507.21	90.00	180.13	7,080.00	235.16	-3.32	9.00	7.45	-16.43	-179.77	
14,515.63	90.00	180.13	7,080.00	-6,773.24	-18.74	0.00	0.00	0.00	0.00	GOURD 1930-04H_B

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well GOURD 1930-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5036.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5036.00usft (RIG)
Site:	1N-64W-19 GOURD 1930 PAD	North Reference:	True
Well:	GOURD 1930-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 350.00ft									
400.00	1.00	359.90	400.00	0.44	0.00	-0.44	2.00	2.00	0.00
500.00	3.00	359.90	499.93	3.93	-0.01	-3.93	2.00	2.00	0.00
600.00	5.00	359.90	599.68	10.90	-0.02	-10.90	2.00	2.00	0.00
700.00	7.00	359.90	699.13	21.35	-0.04	-21.35	2.00	2.00	0.00
775.00	8.50	359.90	773.44	31.47	-0.05	-31.47	2.00	2.00	0.00
Hold Tangent @ 775.00ft									
800.00	8.50	359.90	798.17	35.16	-0.06	-35.16	0.00	0.00	0.00
900.00	8.50	359.90	897.07	49.94	-0.09	-49.94	0.00	0.00	0.00
1,000.00	8.50	359.90	995.97	64.72	-0.11	-64.72	0.00	0.00	0.00
1,100.00	8.50	359.90	1,094.87	79.51	-0.14	-79.50	0.00	0.00	0.00
1,200.00	8.50	359.90	1,193.77	94.29	-0.16	-94.29	0.00	0.00	0.00
1,300.00	8.50	359.90	1,292.68	109.07	-0.19	-109.07	0.00	0.00	0.00
1,400.00	8.50	359.90	1,391.58	123.85	-0.22	-123.85	0.00	0.00	0.00
1,500.00	8.50	359.90	1,490.48	138.63	-0.24	-138.63	0.00	0.00	0.00
1,600.00	8.50	359.90	1,589.38	153.41	-0.27	-153.41	0.00	0.00	0.00
1,700.00	8.50	359.90	1,688.28	168.19	-0.29	-168.19	0.00	0.00	0.00
1,711.85	8.50	359.90	1,700.00	169.94	-0.30	-169.94	0.00	0.00	0.00
9 5/8"									
1,800.00	8.50	359.90	1,787.18	182.97	-0.32	-182.97	0.00	0.00	0.00
1,900.00	8.50	359.90	1,886.09	197.75	-0.35	-197.75	0.00	0.00	0.00
2,000.00	8.50	359.90	1,984.99	212.53	-0.37	-212.53	0.00	0.00	0.00
2,100.00	8.50	359.90	2,083.89	227.31	-0.40	-227.31	0.00	0.00	0.00
2,200.00	8.50	359.90	2,182.79	242.10	-0.42	-242.09	0.00	0.00	0.00
2,300.00	8.50	359.90	2,281.69	256.88	-0.45	-256.87	0.00	0.00	0.00
2,400.00	8.50	359.90	2,380.59	271.66	-0.47	-271.66	0.00	0.00	0.00
2,500.00	8.50	359.90	2,479.50	286.44	-0.50	-286.44	0.00	0.00	0.00
2,600.00	8.50	359.90	2,578.40	301.22	-0.53	-301.22	0.00	0.00	0.00
2,700.00	8.50	359.90	2,677.30	316.00	-0.55	-316.00	0.00	0.00	0.00
2,800.00	8.50	359.90	2,776.20	330.78	-0.58	-330.78	0.00	0.00	0.00
2,900.00	8.50	359.90	2,875.10	345.56	-0.60	-345.56	0.00	0.00	0.00
3,000.00	8.50	359.90	2,974.00	360.34	-0.63	-360.34	0.00	0.00	0.00
3,100.00	8.50	359.90	3,072.90	375.12	-0.65	-375.12	0.00	0.00	0.00
3,200.00	8.50	359.90	3,171.81	389.90	-0.68	-389.90	0.00	0.00	0.00
3,300.00	8.50	359.90	3,270.71	404.69	-0.71	-404.68	0.00	0.00	0.00
3,400.00	8.50	359.90	3,369.61	419.47	-0.73	-419.46	0.00	0.00	0.00
3,500.00	8.50	359.90	3,468.51	434.25	-0.76	-434.24	0.00	0.00	0.00
3,600.00	8.50	359.90	3,567.41	449.03	-0.78	-449.03	0.00	0.00	0.00
3,700.00	8.50	359.90	3,666.31	463.81	-0.81	-463.81	0.00	0.00	0.00
3,800.00	8.50	359.90	3,765.22	478.59	-0.84	-478.59	0.00	0.00	0.00
3,900.00	8.50	359.90	3,864.12	493.37	-0.86	-493.37	0.00	0.00	0.00
4,000.00	8.50	359.90	3,963.02	508.15	-0.89	-508.15	0.00	0.00	0.00
4,100.00	8.50	359.90	4,061.92	522.93	-0.91	-522.93	0.00	0.00	0.00
4,200.00	8.50	359.90	4,160.82	537.71	-0.94	-537.71	0.00	0.00	0.00
4,300.00	8.50	359.90	4,259.72	552.49	-0.96	-552.49	0.00	0.00	0.00
4,400.00	8.50	359.90	4,358.63	567.28	-0.99	-567.27	0.00	0.00	0.00
4,500.00	8.50	359.90	4,457.53	582.06	-1.02	-582.05	0.00	0.00	0.00
4,600.00	8.50	359.90	4,556.43	596.84	-1.04	-596.83	0.00	0.00	0.00

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Planning Report

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Well:	GOURD 1930-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned 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)
4,700.00	8.50	359.90	4,655.33	611.62	-1.07	-611.61	0.00	0.00	0.00
4,800.00	8.50	359.90	4,754.23	626.40	-1.09	-626.40	0.00	0.00	0.00
4,900.00	8.50	359.90	4,853.13	641.18	-1.12	-641.18	0.00	0.00	0.00
5,000.00	8.50	359.90	4,952.03	655.96	-1.14	-655.96	0.00	0.00	0.00
5,100.00	8.50	359.90	5,050.94	670.74	-1.17	-670.74	0.00	0.00	0.00
5,200.00	8.50	359.90	5,149.84	685.52	-1.20	-685.52	0.00	0.00	0.00
5,300.00	8.50	359.90	5,248.74	700.30	-1.22	-700.30	0.00	0.00	0.00
5,400.00	8.50	359.90	5,347.64	715.08	-1.25	-715.08	0.00	0.00	0.00
5,500.00	8.50	359.90	5,446.54	729.87	-1.27	-729.86	0.00	0.00	0.00
5,600.00	8.50	359.90	5,545.44	744.65	-1.30	-744.64	0.00	0.00	0.00
5,700.00	8.50	359.90	5,644.35	759.43	-1.33	-759.42	0.00	0.00	0.00
5,800.00	8.50	359.90	5,743.25	774.21	-1.35	-774.20	0.00	0.00	0.00
5,900.00	8.50	359.90	5,842.15	788.99	-1.38	-788.98	0.00	0.00	0.00
6,000.00	8.50	359.90	5,941.05	803.77	-1.40	-803.76	0.00	0.00	0.00
6,100.00	8.50	359.90	6,039.95	818.55	-1.43	-818.55	0.00	0.00	0.00
6,200.00	8.50	359.90	6,138.85	833.33	-1.45	-833.33	0.00	0.00	0.00
6,300.00	8.50	359.90	6,237.76	848.11	-1.48	-848.11	0.00	0.00	0.00
6,400.00	8.50	359.90	6,336.66	862.89	-1.51	-862.89	0.00	0.00	0.00
6,412.77	8.50	359.90	6,349.29	864.78	-1.51	-864.78	0.00	0.00	0.00
KOP @ 6412.77ft :: DLS = 9°/100'									
6,500.00	0.65	357.15	6,436.17	871.73	-1.55	-871.73	9.00	-9.00	-3.15
6,600.00	8.35	180.36	6,535.84	865.02	-1.62	-865.02	9.00	7.70	-176.79
6,700.00	17.35	180.23	6,633.24	842.81	-1.73	-842.80	9.00	9.00	-0.12
6,800.00	26.35	180.19	6,725.96	805.63	-1.86	-805.62	9.00	9.00	-0.04
6,900.00	35.35	180.17	6,811.72	754.40	-2.02	-754.39	9.00	9.00	-0.02
7,000.00	44.35	180.16	6,888.41	690.39	-2.21	-690.38	9.00	9.00	-0.01
7,100.00	53.35	180.15	6,954.15	615.16	-2.41	-615.16	9.00	9.00	-0.01
7,200.00	62.35	180.14	7,007.31	530.58	-2.63	-530.58	9.00	9.00	-0.01
7,300.00	71.35	180.14	7,046.58	438.73	-2.86	-438.72	9.00	9.00	-0.01
7,400.00	80.35	180.13	7,071.00	341.86	-3.08	-341.86	9.00	9.00	-0.01
7,500.00	89.35	180.13	7,079.96	242.37	-3.31	-242.36	9.00	9.00	-0.01
7,507.21	90.00	180.13	7,080.00	235.16	-3.32	-235.15	9.00	9.00	-0.01
End Build @ 7507.21ft									
7,600.00	90.00	180.13	7,080.00	142.37	-3.53	-142.36	0.00	0.00	0.00
7,700.00	90.00	180.13	7,080.00	42.37	-3.75	-42.36	0.00	0.00	0.00
7,800.00	90.00	180.13	7,080.00	-57.63	-3.97	57.64	0.00	0.00	0.00
7,900.00	90.00	180.13	7,080.00	-157.63	-4.19	157.64	0.00	0.00	0.00
8,000.00	90.00	180.13	7,080.00	-257.63	-4.41	257.64	0.00	0.00	0.00
8,100.00	90.00	180.13	7,080.00	-357.63	-4.63	357.64	0.00	0.00	0.00
8,200.00	90.00	180.13	7,080.00	-457.63	-4.85	457.64	0.00	0.00	0.00
8,300.00	90.00	180.13	7,080.00	-557.63	-5.07	557.64	0.00	0.00	0.00
8,400.00	90.00	180.13	7,080.00	-657.63	-5.29	657.64	0.00	0.00	0.00
8,500.00	90.00	180.13	7,080.00	-757.63	-5.51	757.64	0.00	0.00	0.00
8,600.00	90.00	180.13	7,080.00	-857.63	-5.73	857.64	0.00	0.00	0.00
8,700.00	90.00	180.13	7,080.00	-957.63	-5.95	957.64	0.00	0.00	0.00
8,800.00	90.00	180.13	7,080.00	-1,057.63	-6.17	1,057.64	0.00	0.00	0.00
8,900.00	90.00	180.13	7,080.00	-1,157.63	-6.39	1,157.64	0.00	0.00	0.00
9,000.00	90.00	180.13	7,080.00	-1,257.63	-6.61	1,257.64	0.00	0.00	0.00
9,100.00	90.00	180.13	7,080.00	-1,357.63	-6.83	1,357.64	0.00	0.00	0.00
9,200.00	90.00	180.13	7,080.00	-1,457.63	-7.05	1,457.64	0.00	0.00	0.00
9,300.00	90.00	180.13	7,080.00	-1,557.63	-7.27	1,557.64	0.00	0.00	0.00
9,400.00	90.00	180.13	7,080.00	-1,657.63	-7.49	1,657.64	0.00	0.00	0.00
9,500.00	90.00	180.13	7,080.00	-1,757.62	-7.71	1,757.64	0.00	0.00	0.00
9,600.00	90.00	180.13	7,080.00	-1,857.62	-7.93	1,857.64	0.00	0.00	0.00

Planning Report

Planned 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)
9,700.00	90.00	180.13	7,080.00	-1,957.62	-8.15	1,957.64	0.00	0.00	0.00
9,800.00	90.00	180.13	7,080.00	-2,057.62	-8.37	2,057.64	0.00	0.00	0.00
9,900.00	90.00	180.13	7,080.00	-2,157.62	-8.59	2,157.64	0.00	0.00	0.00
10,000.00	90.00	180.13	7,080.00	-2,257.62	-8.81	2,257.64	0.00	0.00	0.00
10,100.00	90.00	180.13	7,080.00	-2,357.62	-9.03	2,357.64	0.00	0.00	0.00
10,200.00	90.00	180.13	7,080.00	-2,457.62	-9.25	2,457.64	0.00	0.00	0.00
10,300.00	90.00	180.13	7,080.00	-2,557.62	-9.47	2,557.64	0.00	0.00	0.00
10,400.00	90.00	180.13	7,080.00	-2,657.62	-9.69	2,657.64	0.00	0.00	0.00
10,500.00	90.00	180.13	7,080.00	-2,757.62	-9.91	2,757.64	0.00	0.00	0.00
10,600.00	90.00	180.13	7,080.00	-2,857.62	-10.13	2,857.64	0.00	0.00	0.00
10,700.00	90.00	180.13	7,080.00	-2,957.62	-10.35	2,957.64	0.00	0.00	0.00
10,800.00	90.00	180.13	7,080.00	-3,057.62	-10.57	3,057.64	0.00	0.00	0.00
10,900.00	90.00	180.13	7,080.00	-3,157.62	-10.79	3,157.64	0.00	0.00	0.00
11,000.00	90.00	180.13	7,080.00	-3,257.62	-11.01	3,257.64	0.00	0.00	0.00
11,100.00	90.00	180.13	7,080.00	-3,357.62	-11.23	3,357.64	0.00	0.00	0.00
11,200.00	90.00	180.13	7,080.00	-3,457.62	-11.45	3,457.64	0.00	0.00	0.00
11,300.00	90.00	180.13	7,080.00	-3,557.62	-11.67	3,557.64	0.00	0.00	0.00
11,400.00	90.00	180.13	7,080.00	-3,657.62	-11.89	3,657.64	0.00	0.00	0.00
11,500.00	90.00	180.13	7,080.00	-3,757.62	-12.11	3,757.64	0.00	0.00	0.00
11,600.00	90.00	180.13	7,080.00	-3,857.62	-12.33	3,857.64	0.00	0.00	0.00
11,700.00	90.00	180.13	7,080.00	-3,957.62	-12.55	3,957.64	0.00	0.00	0.00
11,800.00	90.00	180.13	7,080.00	-4,057.62	-12.77	4,057.64	0.00	0.00	0.00
11,900.00	90.00	180.13	7,080.00	-4,157.62	-12.99	4,157.64	0.00	0.00	0.00
12,000.00	90.00	180.13	7,080.00	-4,257.62	-13.21	4,257.64	0.00	0.00	0.00
12,100.00	90.00	180.13	7,080.00	-4,357.62	-13.43	4,357.64	0.00	0.00	0.00
12,200.00	90.00	180.13	7,080.00	-4,457.62	-13.65	4,457.64	0.00	0.00	0.00
12,300.00	90.00	180.13	7,080.00	-4,557.62	-13.87	4,557.64	0.00	0.00	0.00
12,400.00	90.00	180.13	7,080.00	-4,657.62	-14.09	4,657.64	0.00	0.00	0.00
12,500.00	90.00	180.13	7,080.00	-4,757.62	-14.30	4,757.64	0.00	0.00	0.00
12,600.00	90.00	180.13	7,080.00	-4,857.62	-14.52	4,857.64	0.00	0.00	0.00
12,700.00	90.00	180.13	7,080.00	-4,957.62	-14.74	4,957.64	0.00	0.00	0.00
12,800.00	90.00	180.13	7,080.00	-5,057.62	-14.96	5,057.64	0.00	0.00	0.00
12,900.00	90.00	180.13	7,080.00	-5,157.62	-15.18	5,157.64	0.00	0.00	0.00
13,000.00	90.00	180.13	7,080.00	-5,257.62	-15.40	5,257.64	0.00	0.00	0.00
13,100.00	90.00	180.13	7,080.00	-5,357.62	-15.62	5,357.64	0.00	0.00	0.00
13,200.00	90.00	180.13	7,080.00	-5,457.62	-15.84	5,457.64	0.00	0.00	0.00
13,300.00	90.00	180.13	7,080.00	-5,557.62	-16.06	5,557.64	0.00	0.00	0.00
13,400.00	90.00	180.13	7,080.00	-5,657.62	-16.28	5,657.64	0.00	0.00	0.00
13,500.00	90.00	180.13	7,080.00	-5,757.62	-16.50	5,757.64	0.00	0.00	0.00
13,600.00	90.00	180.13	7,080.00	-5,857.62	-16.72	5,857.64	0.00	0.00	0.00
13,700.00	90.00	180.13	7,080.00	-5,957.61	-16.94	5,957.64	0.00	0.00	0.00
13,800.00	90.00	180.13	7,080.00	-6,057.61	-17.16	6,057.64	0.00	0.00	0.00
13,900.00	90.00	180.13	7,080.00	-6,157.61	-17.38	6,157.64	0.00	0.00	0.00
14,000.00	90.00	180.13	7,080.00	-6,257.61	-17.60	6,257.64	0.00	0.00	0.00
14,100.00	90.00	180.13	7,080.00	-6,357.61	-17.82	6,357.64	0.00	0.00	0.00
14,200.00	90.00	180.13	7,080.00	-6,457.61	-18.04	6,457.64	0.00	0.00	0.00
14,300.00	90.00	180.13	7,080.00	-6,557.61	-18.26	6,557.64	0.00	0.00	0.00
14,400.00	90.00	180.13	7,080.00	-6,657.61	-18.48	6,657.64	0.00	0.00	0.00
14,500.00	90.00	180.13	7,080.00	-6,757.61	-18.70	6,757.64	0.00	0.00	0.00
14,515.63	90.00	180.13	7,080.00	-6,773.24	-18.74	6,773.27	0.00	0.00	0.00
TD Well @ 14515.63ft									

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well GOURD 1930-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5036.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5036.00usft (RIG)
Site:	1N-64W-19 GOURD 1930 PAD	North Reference:	True
Well:	GOURD 1930-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,711.85	1,700.00	9 5/8"		9-5/8	13-1/2

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
350.00	350.00	0.00	0.00	Begin Nudge @ 350.00ft	
775.00	773.44	31.47	-0.05	Hold Tangent @ 775.00ft	
6,412.77	6,349.29	864.78	-1.51	KOP @ 6412.77ft :: DLS = 9°/100'	
7,507.21	7,080.00	235.16	-3.32	End Build @ 7507.21ft	
14,515.63	7,080.00	-6,773.24	-18.74	TD Well @ 14515.63ft	