

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-19 GOURD 1930 PAD

GOURD 1930-01H

Wellbore #1

Plan: Design #1

Standard Planning Report

21 May, 2019

Project: WATTENBERG FIELD
Site: 1N-64W-19 GOURD 1930 PAD
Well: GOURD 1930-01H
Wellbore: Wellbore #1
Design: Design #1

VERDAD RESOURCES

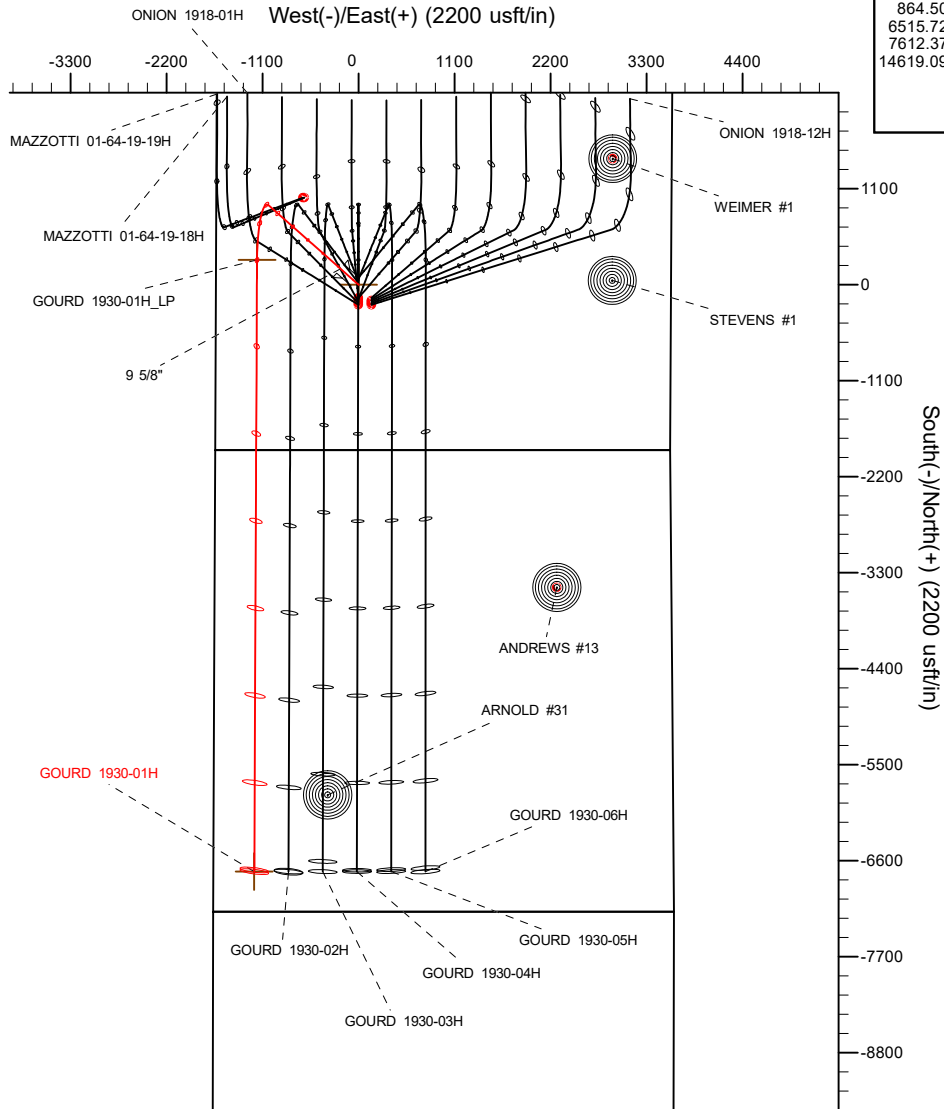
CASING DETAILS

TVD	MD	Name	Size
1700.00	1729.10	9 5/8"	9-5/8

SHL
1895' FSL
1635' FWL

LP
2180' FSL
470' FWL

BHL
460' FNL
470' FWL

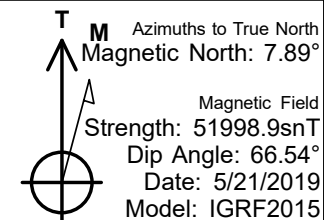
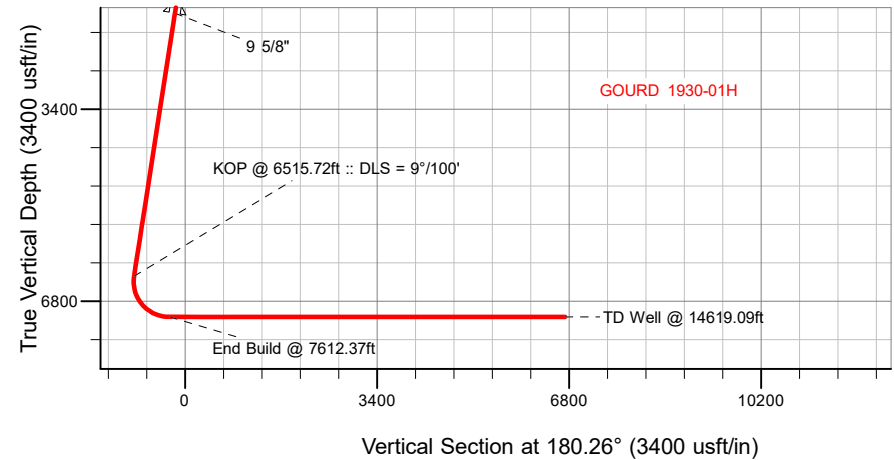


SECTION DETAILS

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
864.50	13.29	311.40	858.56	50.74	-57.55	2.00	311.40	-50.48	
6515.72	13.29	311.40	6358.43	909.85	-1032.02	0.00	0.00	-905.16	
7612.37	90.00	180.26	7080.00	281.14	-1163.24	9.00	-130.37	-275.86	
14619.09	90.00	180.26	7080.00	-6725.50	-1195.07	0.00	0.00	6730.85	GOURD 1930-01H_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
GOURD 1930-01H_SHL	0.00	0.00	0.00	40.034757	-104.596973
GOURD 1930-01H_BHL	7080.00	-6725.50	-1195.07	40.016294	-104.601240



WELL DETAILS: GOURD 1930-01H

GL = 5012'

RKB = 24' @ 5036.00usft (RIG)

Plan: Design #1 (GOURD 1930-01H/Wellbore #1)

Date: 5/21/2019

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well GOURD 1930-01H
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 1930-01H	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 1930-01H			
Well Position	+N/-S	0.00 usft	Northing:	1,256,795.51 usft
	+E/-W	0.00 usft	Easting:	3,252,852.90 usft
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	51,998.90600546

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	180.26

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	14,619.09	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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
864.50	13.29	311.40	858.56	50.74	-57.55	2.00	2.00	0.00	311.40	
6,515.72	13.29	311.40	6,358.43	909.85	-1,032.02	0.00	0.00	0.00	0.00	
7,612.37	90.00	180.26	7,080.00	281.14	-1,163.24	9.00	6.99	-11.96	-130.37	
14,619.09	90.00	180.26	7,080.00	-6,725.50	-1,195.07	0.00	0.00	0.00	0.00	GOURD 1930-01H_B

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well GOURD 1930-01H
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 1930-01H	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
Begin Nudge @ 200.00ft									
300.00	2.00	311.40	299.98	1.15	-1.31	-1.15	2.00	2.00	0.00
400.00	4.00	311.40	399.84	4.61	-5.23	-4.59	2.00	2.00	0.00
500.00	6.00	311.40	499.45	10.38	-11.77	-10.32	2.00	2.00	0.00
600.00	8.00	311.40	598.70	18.44	-20.91	-18.34	2.00	2.00	0.00
700.00	10.00	311.40	697.47	28.78	-32.65	-28.63	2.00	2.00	0.00
800.00	12.00	311.40	795.62	41.40	-46.96	-41.19	2.00	2.00	0.00
864.50	13.29	311.40	858.56	50.74	-57.55	-50.48	2.00	2.00	0.00
Hold Tangent @ 864.50ft									
900.00	13.29	311.40	893.11	56.13	-63.67	-55.84	0.00	0.00	0.00
1,000.00	13.29	311.40	990.43	71.34	-80.91	-70.97	0.00	0.00	0.00
1,100.00	13.29	311.40	1,087.75	86.54	-98.16	-86.09	0.00	0.00	0.00
1,200.00	13.29	311.40	1,185.07	101.74	-115.40	-101.22	0.00	0.00	0.00
1,300.00	13.29	311.40	1,282.39	116.94	-132.65	-116.34	0.00	0.00	0.00
1,400.00	13.29	311.40	1,379.72	132.15	-149.89	-131.46	0.00	0.00	0.00
1,500.00	13.29	311.40	1,477.04	147.35	-167.13	-146.59	0.00	0.00	0.00
1,600.00	13.29	311.40	1,574.36	162.55	-184.38	-161.71	0.00	0.00	0.00
1,700.00	13.29	311.40	1,671.68	177.75	-201.62	-176.83	0.00	0.00	0.00
1,729.10	13.29	311.40	1,700.00	182.18	-206.64	-181.24	0.00	0.00	0.00
9 5/8"									
1,800.00	13.29	311.40	1,769.00	192.95	-218.86	-191.96	0.00	0.00	0.00
1,900.00	13.29	311.40	1,866.33	208.16	-236.11	-207.08	0.00	0.00	0.00
2,000.00	13.29	311.40	1,963.65	223.36	-253.35	-222.21	0.00	0.00	0.00
2,100.00	13.29	311.40	2,060.97	238.56	-270.59	-237.33	0.00	0.00	0.00
2,200.00	13.29	311.40	2,158.29	253.76	-287.84	-252.45	0.00	0.00	0.00
2,300.00	13.29	311.40	2,255.61	268.97	-305.08	-267.58	0.00	0.00	0.00
2,400.00	13.29	311.40	2,352.94	284.17	-322.32	-282.70	0.00	0.00	0.00
2,500.00	13.29	311.40	2,450.26	299.37	-339.57	-297.83	0.00	0.00	0.00
2,600.00	13.29	311.40	2,547.58	314.57	-356.81	-312.95	0.00	0.00	0.00
2,700.00	13.29	311.40	2,644.90	329.77	-374.06	-328.07	0.00	0.00	0.00
2,800.00	13.29	311.40	2,742.22	344.98	-391.30	-343.20	0.00	0.00	0.00
2,900.00	13.29	311.40	2,839.54	360.18	-408.54	-358.32	0.00	0.00	0.00
3,000.00	13.29	311.40	2,936.87	375.38	-425.79	-373.44	0.00	0.00	0.00
3,100.00	13.29	311.40	3,034.19	390.58	-443.03	-388.57	0.00	0.00	0.00
3,200.00	13.29	311.40	3,131.51	405.79	-460.27	-403.69	0.00	0.00	0.00
3,300.00	13.29	311.40	3,228.83	420.99	-477.52	-418.82	0.00	0.00	0.00
3,400.00	13.29	311.40	3,326.15	436.19	-494.76	-433.94	0.00	0.00	0.00
3,500.00	13.29	311.40	3,423.48	451.39	-512.00	-449.06	0.00	0.00	0.00
3,600.00	13.29	311.40	3,520.80	466.59	-529.25	-464.19	0.00	0.00	0.00
3,700.00	13.29	311.40	3,618.12	481.80	-546.49	-479.31	0.00	0.00	0.00
3,800.00	13.29	311.40	3,715.44	497.00	-563.73	-494.44	0.00	0.00	0.00
3,900.00	13.29	311.40	3,812.76	512.20	-580.98	-509.56	0.00	0.00	0.00
4,000.00	13.29	311.40	3,910.09	527.40	-598.22	-524.68	0.00	0.00	0.00
4,100.00	13.29	311.40	4,007.41	542.61	-615.46	-539.81	0.00	0.00	0.00
4,200.00	13.29	311.40	4,104.73	557.81	-632.71	-554.93	0.00	0.00	0.00
4,300.00	13.29	311.40	4,202.05	573.01	-649.95	-570.05	0.00	0.00	0.00
4,400.00	13.29	311.40	4,299.37	588.21	-667.20	-585.18	0.00	0.00	0.00
4,500.00	13.29	311.40	4,396.70	603.41	-684.44	-600.30	0.00	0.00	0.00
4,600.00	13.29	311.40	4,494.02	618.62	-701.68	-615.43	0.00	0.00	0.00
4,700.00	13.29	311.40	4,591.34	633.82	-718.93	-630.55	0.00	0.00	0.00

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Well:	GOURD 1930-01H	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)
4,800.00	13.29	311.40	4,688.66	649.02	-736.17	-645.67	0.00	0.00	0.00
4,900.00	13.29	311.40	4,785.98	664.22	-753.41	-660.80	0.00	0.00	0.00
5,000.00	13.29	311.40	4,883.30	679.43	-770.66	-675.92	0.00	0.00	0.00
5,100.00	13.29	311.40	4,980.63	694.63	-787.90	-691.05	0.00	0.00	0.00
5,200.00	13.29	311.40	5,077.95	709.83	-805.14	-706.17	0.00	0.00	0.00
5,300.00	13.29	311.40	5,175.27	725.03	-822.39	-721.29	0.00	0.00	0.00
5,400.00	13.29	311.40	5,272.59	740.23	-839.63	-736.42	0.00	0.00	0.00
5,500.00	13.29	311.40	5,369.91	755.44	-856.87	-751.54	0.00	0.00	0.00
5,600.00	13.29	311.40	5,467.24	770.64	-874.12	-766.66	0.00	0.00	0.00
5,700.00	13.29	311.40	5,564.56	785.84	-891.36	-781.79	0.00	0.00	0.00
5,800.00	13.29	311.40	5,661.88	801.04	-908.61	-796.91	0.00	0.00	0.00
5,900.00	13.29	311.40	5,759.20	816.25	-925.85	-812.04	0.00	0.00	0.00
6,000.00	13.29	311.40	5,856.52	831.45	-943.09	-827.16	0.00	0.00	0.00
6,100.00	13.29	311.40	5,953.85	846.65	-960.34	-842.28	0.00	0.00	0.00
6,200.00	13.29	311.40	6,051.17	861.85	-977.58	-857.41	0.00	0.00	0.00
6,300.00	13.29	311.40	6,148.49	877.05	-994.82	-872.53	0.00	0.00	0.00
6,400.00	13.29	311.40	6,245.81	892.26	-1,012.07	-887.65	0.00	0.00	0.00
6,500.00	13.29	311.40	6,343.13	907.46	-1,029.31	-902.78	0.00	0.00	0.00
6,515.72	13.29	311.40	6,358.43	909.85	-1,032.02	-905.16	0.00	0.00	0.00
KOP @ 6515.72ft :: DLS = 9°/100'									
6,600.00	10.15	276.59	6,441.05	917.12	-1,046.68	-912.36	9.00	-3.73	-41.30
6,700.00	12.78	231.92	6,539.23	911.30	-1,064.18	-906.46	9.00	2.63	-44.67
6,800.00	19.59	210.24	6,635.29	889.95	-1,081.36	-885.03	9.00	6.82	-21.68
6,900.00	27.66	200.10	6,726.87	853.59	-1,097.82	-848.60	9.00	8.06	-10.14
7,000.00	36.14	194.36	6,811.71	803.13	-1,113.14	-798.07	9.00	8.48	-5.74
7,100.00	44.80	190.58	6,887.73	739.80	-1,126.95	-734.68	9.00	8.66	-3.78
7,200.00	53.55	187.81	6,953.05	665.17	-1,138.91	-659.99	9.00	8.75	-2.77
7,300.00	62.36	185.61	7,006.05	581.07	-1,148.72	-575.85	9.00	8.80	-2.20
7,400.00	71.19	183.73	7,045.45	489.57	-1,156.14	-484.31	9.00	8.83	-1.87
7,500.00	80.04	182.05	7,070.27	392.92	-1,161.00	-387.65	9.00	8.85	-1.68
7,600.00	88.90	180.46	7,079.89	293.51	-1,163.16	-288.23	9.00	8.86	-1.59
7,612.37	90.00	180.26	7,080.00	281.14	-1,163.24	-275.86	9.00	8.86	-1.58
End Build @ 7612.37ft									
7,700.00	90.00	180.26	7,080.00	193.51	-1,163.64	-188.23	0.00	0.00	0.00
7,800.00	90.00	180.26	7,080.00	93.51	-1,164.09	-88.23	0.00	0.00	0.00
7,900.00	90.00	180.26	7,080.00	-6.48	-1,164.54	11.77	0.00	0.00	0.00
8,000.00	90.00	180.26	7,080.00	-106.48	-1,165.00	111.77	0.00	0.00	0.00
8,100.00	90.00	180.26	7,080.00	-206.48	-1,165.45	211.77	0.00	0.00	0.00
8,200.00	90.00	180.26	7,080.00	-306.48	-1,165.91	311.77	0.00	0.00	0.00
8,300.00	90.00	180.26	7,080.00	-406.48	-1,166.36	411.77	0.00	0.00	0.00
8,400.00	90.00	180.26	7,080.00	-506.48	-1,166.82	511.77	0.00	0.00	0.00
8,500.00	90.00	180.26	7,080.00	-606.48	-1,167.27	611.77	0.00	0.00	0.00
8,600.00	90.00	180.26	7,080.00	-706.48	-1,167.73	711.77	0.00	0.00	0.00
8,700.00	90.00	180.26	7,080.00	-806.48	-1,168.18	811.77	0.00	0.00	0.00
8,800.00	90.00	180.26	7,080.00	-906.48	-1,168.63	911.77	0.00	0.00	0.00
8,900.00	90.00	180.26	7,080.00	-1,006.47	-1,169.09	1,011.77	0.00	0.00	0.00
9,000.00	90.00	180.26	7,080.00	-1,106.47	-1,169.54	1,111.77	0.00	0.00	0.00
9,100.00	90.00	180.26	7,080.00	-1,206.47	-1,170.00	1,211.77	0.00	0.00	0.00
9,200.00	90.00	180.26	7,080.00	-1,306.47	-1,170.45	1,311.77	0.00	0.00	0.00
9,300.00	90.00	180.26	7,080.00	-1,406.47	-1,170.91	1,411.77	0.00	0.00	0.00
9,400.00	90.00	180.26	7,080.00	-1,506.47	-1,171.36	1,511.77	0.00	0.00	0.00
9,500.00	90.00	180.26	7,080.00	-1,606.47	-1,171.81	1,611.77	0.00	0.00	0.00
9,600.00	90.00	180.26	7,080.00	-1,706.47	-1,172.27	1,711.77	0.00	0.00	0.00
9,700.00	90.00	180.26	7,080.00	-1,806.47	-1,172.72	1,811.77	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)
9,800.00	90.00	180.26	7,080.00	-1,906.46	-1,173.18	1,911.77	0.00	0.00	0.00
9,900.00	90.00	180.26	7,080.00	-2,006.46	-1,173.63	2,011.77	0.00	0.00	0.00
10,000.00	90.00	180.26	7,080.00	-2,106.46	-1,174.09	2,111.77	0.00	0.00	0.00
10,100.00	90.00	180.26	7,080.00	-2,206.46	-1,174.54	2,211.77	0.00	0.00	0.00
10,200.00	90.00	180.26	7,080.00	-2,306.46	-1,175.00	2,311.77	0.00	0.00	0.00
10,300.00	90.00	180.26	7,080.00	-2,406.46	-1,175.45	2,411.77	0.00	0.00	0.00
10,400.00	90.00	180.26	7,080.00	-2,506.46	-1,175.90	2,511.77	0.00	0.00	0.00
10,500.00	90.00	180.26	7,080.00	-2,606.46	-1,176.36	2,611.77	0.00	0.00	0.00
10,600.00	90.00	180.26	7,080.00	-2,706.46	-1,176.81	2,711.77	0.00	0.00	0.00
10,700.00	90.00	180.26	7,080.00	-2,806.46	-1,177.27	2,811.77	0.00	0.00	0.00
10,800.00	90.00	180.26	7,080.00	-2,906.45	-1,177.72	2,911.77	0.00	0.00	0.00
10,900.00	90.00	180.26	7,080.00	-3,006.45	-1,178.18	3,011.77	0.00	0.00	0.00
11,000.00	90.00	180.26	7,080.00	-3,106.45	-1,178.63	3,111.77	0.00	0.00	0.00
11,100.00	90.00	180.26	7,080.00	-3,206.45	-1,179.08	3,211.77	0.00	0.00	0.00
11,200.00	90.00	180.26	7,080.00	-3,306.45	-1,179.54	3,311.77	0.00	0.00	0.00
11,300.00	90.00	180.26	7,080.00	-3,406.45	-1,179.99	3,411.77	0.00	0.00	0.00
11,400.00	90.00	180.26	7,080.00	-3,506.45	-1,180.45	3,511.77	0.00	0.00	0.00
11,500.00	90.00	180.26	7,080.00	-3,606.45	-1,180.90	3,611.77	0.00	0.00	0.00
11,600.00	90.00	180.26	7,080.00	-3,706.45	-1,181.36	3,711.77	0.00	0.00	0.00
11,700.00	90.00	180.26	7,080.00	-3,806.45	-1,181.81	3,811.77	0.00	0.00	0.00
11,800.00	90.00	180.26	7,080.00	-3,906.44	-1,182.26	3,911.77	0.00	0.00	0.00
11,900.00	90.00	180.26	7,080.00	-4,006.44	-1,182.72	4,011.77	0.00	0.00	0.00
12,000.00	90.00	180.26	7,080.00	-4,106.44	-1,183.17	4,111.77	0.00	0.00	0.00
12,100.00	90.00	180.26	7,080.00	-4,206.44	-1,183.63	4,211.77	0.00	0.00	0.00
12,200.00	90.00	180.26	7,080.00	-4,306.44	-1,184.08	4,311.77	0.00	0.00	0.00
12,300.00	90.00	180.26	7,080.00	-4,406.44	-1,184.54	4,411.77	0.00	0.00	0.00
12,400.00	90.00	180.26	7,080.00	-4,506.44	-1,184.99	4,511.77	0.00	0.00	0.00
12,500.00	90.00	180.26	7,080.00	-4,606.44	-1,185.45	4,611.77	0.00	0.00	0.00
12,600.00	90.00	180.26	7,080.00	-4,706.44	-1,185.90	4,711.77	0.00	0.00	0.00
12,700.00	90.00	180.26	7,080.00	-4,806.43	-1,186.35	4,811.77	0.00	0.00	0.00
12,800.00	90.00	180.26	7,080.00	-4,906.43	-1,186.81	4,911.77	0.00	0.00	0.00
12,900.00	90.00	180.26	7,080.00	-5,006.43	-1,187.26	5,011.77	0.00	0.00	0.00
13,000.00	90.00	180.26	7,080.00	-5,106.43	-1,187.72	5,111.77	0.00	0.00	0.00
13,100.00	90.00	180.26	7,080.00	-5,206.43	-1,188.17	5,211.77	0.00	0.00	0.00
13,200.00	90.00	180.26	7,080.00	-5,306.43	-1,188.63	5,311.77	0.00	0.00	0.00
13,300.00	90.00	180.26	7,080.00	-5,406.43	-1,189.08	5,411.77	0.00	0.00	0.00
13,400.00	90.00	180.26	7,080.00	-5,506.43	-1,189.53	5,511.77	0.00	0.00	0.00
13,500.00	90.00	180.26	7,080.00	-5,606.43	-1,189.99	5,611.77	0.00	0.00	0.00
13,600.00	90.00	180.26	7,080.00	-5,706.43	-1,190.44	5,711.77	0.00	0.00	0.00
13,700.00	90.00	180.26	7,080.00	-5,806.42	-1,190.90	5,811.77	0.00	0.00	0.00
13,800.00	90.00	180.26	7,080.00	-5,906.42	-1,191.35	5,911.77	0.00	0.00	0.00
13,900.00	90.00	180.26	7,080.00	-6,006.42	-1,191.81	6,011.77	0.00	0.00	0.00
14,000.00	90.00	180.26	7,080.00	-6,106.42	-1,192.26	6,111.77	0.00	0.00	0.00
14,100.00	90.00	180.26	7,080.00	-6,206.42	-1,192.72	6,211.77	0.00	0.00	0.00
14,200.00	90.00	180.26	7,080.00	-6,306.42	-1,193.17	6,311.77	0.00	0.00	0.00
14,300.00	90.00	180.26	7,080.00	-6,406.42	-1,193.62	6,411.77	0.00	0.00	0.00
14,400.00	90.00	180.26	7,080.00	-6,506.42	-1,194.08	6,511.77	0.00	0.00	0.00
14,500.00	90.00	180.26	7,080.00	-6,606.42	-1,194.53	6,611.77	0.00	0.00	0.00
14,600.00	90.00	180.26	7,080.00	-6,706.42	-1,194.99	6,711.77	0.00	0.00	0.00
14,619.09	90.00	180.26	7,080.00	-6,725.50	-1,195.07	6,730.85	0.00	0.00	0.00
TD Well @ 14619.09ft									

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well GOURD 1930-01H
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 1930-01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,729.10	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)		
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft	
864.50	858.56	50.74	-57.55	Hold Tangent @ 864.50ft	
6,515.72	6,358.43	909.85	-1,032.02	KOP @ 6515.72ft :: DLS = 9°/100'	
7,612.37	7,080.00	281.14	-1,163.24	End Build @ 7612.37ft	
14,619.09	7,080.00	-6,725.50	-1,195.07	TD Well @ 14619.09ft	