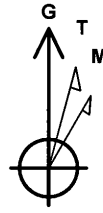


Company Name: Mewbourne Oil Co
West Draw 5 IA #1H
Eddy County, New Mexico
Rig Patterson UTI #101
Created By Shane Robbins
Date 11/8/2011

West Draw 5 IA #1H
Eddy County, New Mexico
Q110375 & WT-11605

Mewbourne Oil Company



Azimuths to Grid North

Correction: 8.09°

Magnetic Field

Strength: 48702.4snT

Dip Angle: 60.36°

Date: 10/18/2011

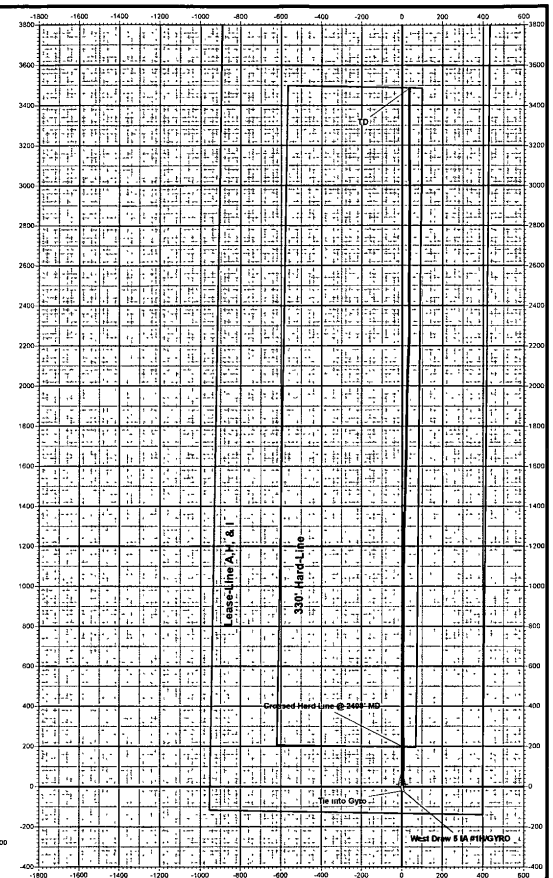
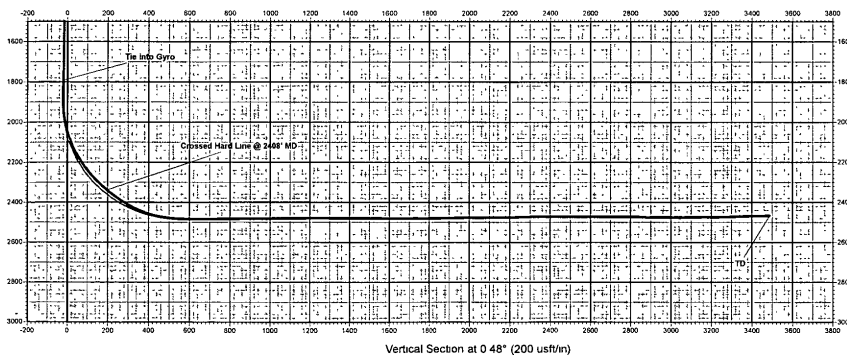
Model: IGRF2010

DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
PSHT, West Draw 5 IA #1H - plan hits target center	2469.0	3468.3	20.4	585224.64	448920.25	32° 36' 31.558 N	104° 29' 57.173 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Departure	Annotation
1792.0	0.67	200.48	1791.8	-20.5	6.8	-20.4	25.2	Tie into Gyro
2407.5	49.53	358.21	2339.7	186.4	7.7	196.5	244.3	Crossed Hard Line @ 2408' MD
2734.0	91.00	1.10	2466.5	3466.3	36.4	3486.5	3534.7	TD



WELL DETAILS West Draw 5 IA #1H

+N-S	+E-W	Ground Level	3491.0	Latitude	Longitude
0.0	0.0	Northing	581736.30	448890.84	32° 35' 57.079 N
		Easting			104° 29' 57.453 W

PROJECT DETAILS: Eddy County, New Mexico

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

30-015-34058



Company: Mewbourne Oil
Lease/Well: West Draw 5 IA/1H

Rig Name: Patterson #101
State/County: New Mexico/Eddy
Latitude: 32.59

GRID North is 0.09 Degrees West of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB=18 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: west draw 5 ia #1h_ed.ut

Minimum Curvature Method

Report Date/Time: 11/11/2011 / 10:12

Vaughn Energy Services
Midland, TX
432-563-5444

Surveyor: Glen McCandless
West Draw 5 IA 1H

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.45	186.26	100.00	-0.39	-0.04	-0.39	0.39	186.26	0.45
200.00	0.56	215.01	200.00	-1.18	-0.37	-1.18	1.23	197.24	0.27
300.00	0.64	204.75	299.99	-2.09	-0.88	-2.09	2.27	202.87	0.13
400.00	0.66	212.02	399.98	-3.09	-1.42	-3.09	3.40	204.73	0.08
500.00	0.60	185.58	499.98	-4.10	-1.78	-4.10	4.47	203.46	0.29
600.00	0.59	178.46	599.97	-5.13	-1.82	-5.13	5.44	199.48	0.07
700.00	0.87	165.01	699.96	-6.38	-1.60	-6.38	6.58	194.12	0.33
800.00	0.84	147.60	799.95	-7.73	-1.02	-7.73	7.80	187.48	0.26
900.00	0.98	110.22	899.94	-8.65	0.18	-8.65	8.65	178.83	0.60
1000.00	1.32	120.36	999.92	-9.52	1.97	-9.52	9.72	168.31	0.40
1100.00	1.18	129.32	1099.90	-10.76	3.76	-10.76	11.40	160.73	0.24
1200.00	1.09	132.05	1199.88	-12.05	5.27	-12.05	13.15	156.39	0.10
1300.00	1.14	149.99	1299.86	-13.55	6.48	-13.55	15.02	154.46	0.35
1400.00	0.86	183.49	1399.84	-15.17	6.93	-15.17	16.68	155.45	0.64
1500.00	0.62	172.31	1499.84	-16.46	6.96	-16.46	17.87	157.09	0.28
1600.00	0.78	173.05	1599.83	-17.66	7.11	-17.66	19.04	158.07	0.16
1700.00	0.98	188.20	1699.82	-19.18	7.07	-19.18	20.44	159.77	0.31
1792.00	0.67	200.48	1791.81	-20.46	6.77	-20.46	21.55	161.69	0.39



Vaughn Energy Services
Midland, TX
432-563-5444
Surveyor: Glen McCandless
West Draw 5 IA 1H

