



Company: Enduring Resources
 Lease/Well: University 48SL/0702UH
 Location: 7.84 miles SE From Big Lake
 Rig Name: VES Crane
 State/County: Texas /Reagan
 Latitude: 31.12, Longitude: -101.36
 GRID North is 0.53 Degrees West of True North
 VS-Azi: 30.00 Degrees



Depth Reference : Ground Level

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: university 48sl 0702uh-de_01.ut

Minimum Curvature Method

Report Date/Time: 9/3/2014 / 08:32

VES Survey International

Fort Worth, Tx

817-741-3610

Surveyor: Casey Gerhards

University 48SL 0702UH / API 42-383-38027

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	0.30	71.37	100.00	0.08	0.25	0.20	0.26	71.37	0.30
200.00	0.38	91.67	200.00	0.16	0.83	0.55	0.84	79.27	0.15
300.00	0.29	94.15	300.00	0.13	1.41	0.82	1.42	84.77	0.10
400.00	0.44	141.11	399.99	-0.19	1.90	0.79	1.91	95.64	0.32
500.00	0.41	159.59	499.99	-0.82	2.27	0.42	2.41	109.89	0.14
600.00	0.36	208.17	599.99	-1.43	2.25	-0.11	2.66	122.46	0.32
700.00	0.24	187.65	699.99	-1.91	2.07	-0.62	2.82	132.63	0.16
800.00	0.30	183.81	799.99	-2.38	2.03	-1.04	3.12	139.52	0.07
900.00	0.25	180.05	899.99	-2.85	2.01	-1.47	3.49	144.86	0.06
906.00	0.29	177.30	905.99	-2.88	2.01	-1.49	3.51	145.11	0.68

VES

VAUGHN ENERGY SERVICES

I Casey Gerhards certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 08/21/14 through 08/21/14 conduct or supervise the taking of a HA Gyro survey from a depth of 0 feet to a depth of 906 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Enduring Resources for the University 48SL Well # 0702UH API # 42-383-38027 in Reagan County / Parish Texas; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services



Casey Gerhards
Service Technician
Vaughn Energy Services